Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	14	(("4247471") or ("4832975") or ("4960602") or ("5066510") or ("5068120") or ("5120563") or ("5166189")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/08 12:31
L2	6	(("3450819") or ("4607052")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/08 12:34
S1	107	obesity and mct	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/08 08:35
S2	5919	mct or medium adj chain adj triglyceride	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/08 08:36
S3	113002	("426").CLAS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/08 08:36
S4	508	S2 and S3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/08 08:36
S5	5478	(426/601-613).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/08 08:37
S6	201	S2 and S5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/08 12:24

```
Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:SSSPTA1302CXP

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1           Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2           "Ask CAS" for self-help around the clock
 NEWS  3  SEP 01   New pricing for the Save Answers for SciFinder Wizard within
                   STN Express with Discover!
 NEWS  4  OCT 28   KOREAPAT now available on STN
 NEWS  5  NOV 30   PHAR reloaded with additional data
 NEWS  6  DEC 01   LISA now available on STN
 NEWS  7  DEC 09   12 databases to be removed from STN on December 31, 2004
 NEWS  8  DEC 15   MEDLINE update schedule for December 2004
 NEWS  9  DEC 17   ELCOM reloaded; updating to resume; current-awareness
                   alerts (SDIs) affected
 NEWS  10 DEC 17   COMPUAB reloaded; updating to resume; current-awareness
                   alerts (SDIs) affected
 NEWS  11 DEC 17   SOLIDSTATE reloaded; updating to resume; current-awareness
                   alerts (SDIs) affected
 NEWS  12 DEC 17   CERAB reloaded; updating to resume; current-awareness
                   alerts (SDIs) affected
 NEWS  13 DEC 17   THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB
 NEWS  14 DEC 30   EPFULL: New patent full text database to be available on STN
 NEWS  15 DEC 30   CAPLUS - PATENT COVERAGE EXPANDED
 NEWS  16 JAN 03   No connect-hour charges in EPFULL during January and
                   February 2005
 NEWS  17 JAN 26   CA/CAPLUS - Expanded patent coverage to include the Russian
                   Agency for Patents and Trademarks (ROSPATENT)

 NEWS EXPRESS  JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 12:40:41 ON 08 FEB 2005

=> file fsta
```

```
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21

FILE 'FSTA' ENTERED AT 12:40:54 ON 08 FEB 2005
COPYRIGHT (C) 2005 International Food Information Service

FILE LAST UPDATED: 7 FEB 2005       <20050207/UP>
FILE COVERS 1969 TO DATE.

=> s mct or medium(w)chain(w)triglyceride
            83 MCT
         23751 MEDIUM
         10816 CHAIN
          2447 TRIGLYCERIDE
            30 MEDIUM(W)CHAIN(W)TRIGLYCERIDE
L1          99 MCT OR MEDIUM(W)CHAIN(W)TRIGLYCERIDE

=> s l1 and obesity
           895 OBESITY
L2           3 L1 AND OBESITY

=> d l2 all 1-3

L2   ANSWER 1 OF 3  FSTA  COPYRIGHT 2005 IFIS on STN
AN   2004:N0459   FSTA
TI   Effects of ingestion of margarine containing medium-chain triglycerides
     for 4 weeks on blood parameters and postprandial thermogenesis.
AU   Nosaka, N.; Suzuki, Y.; Maki, H.; Haruna, H.; Ohara, A.; Kasai, M.; Tsuji,
     H.; Aoyama, T.; Okazaki, M.; Kondo, K.
CS   Div. of Healthcare Sci., Res. Lab., Nisshin Oillio, Ltd., 1 Shinmei-cho,
     Yokosuka, Kanagawa 239-0832, Japan.  E-mail n-
     nosaka(a)nisshin.oilliogroup.com
SO   Journal of Oleo Science, (2003), 52 (11) 571-581, 31 ref.
     ISSN: 1345-8957
DT   Journal
LA   English
AB   A double-blind, controlled study was conducted to investigate the effects
     of prolonged ingestion of margarine containing medium-chain triglycerides
     (MCT-M) on serum lipids, apolipoprotein and vitamin A levels,
     and on postprandial thermogenesis, compared with those of margarine
     containing long-chain triglycerides (LCT-M).  Healthy subjects (n = 26,
     body mass index 22.6 ± 3.3 kg/m.sup.2) were divided into 2 groups and
     each ingested 1950-2400 kcal/day of energy, 59-69 g/day of total fat and
     42 g/day of test margarine (15 g/day of MCT or LCT) for 4 wk.
     Intake of medium-chain fatty acids was significantly greater with the
     MCT-M diet (14.2 ± 0.4 g/day) than with the LCT-M diet (0.2
     ± 0.0 g/day) during the 4 wk period.  There were no marked differences
     in the blood concentration of lipids, lipoproteins, apolipoproteins, retinol,
     glucose, insulin, ketone, hemocytes and electrolytes, or in measures of
     liver and renal function, between the diet groups.  After prolonged
     ingestion of MCT-M, consumption of an MCT-M meal led
     to a significant (P < 0.05) increase in postprandial O.sub.2 consumption
     compared with an LCT-M meal (after 30 min:  MCT-M 45 ± 7
     ml/min. vs. LCT-M 30 ± 7 ml/min.).  The influences of ingestion of
     MCT-M for 4 wk on serum lipids, lipoproteins, apolipoproteins,
     retinol, ketones, plasma glucose and liver and renal function were similar
     to those of LCT-M.  It is suggested that the prolonged ingestion of 15 g
     of MCT in healthy humans did not attenuate the postprandial
     thermogenesis caused by meals containing 5 g of MCT.  Results
     indicate that MCT-M have a possibility of being efficient foods
     for preventing obesity in healthy humans.
CC   N (Fats, Oils and Margarine)
CT   HUMAN PHYSIOLOGY; MARGARINES; TRIGLYCERIDES; PHYSIOLOGICAL EFFECTS
```

L2 ANSWER 2 OF 3 FSTA COPYRIGHT 2005 IFIS on STN
AN 2004:A0853 FSTA
TI Medium- versus long-chain triglycerides for 27 days increases fat oxidation and energy expenditure without resulting in changes in body composition in overweight women.
AU St-Onge, M. P.; Bourque, C.; Jones, P. J. H.; Ross, R.; Parsons, W. E.
CS Correspondence (Reprint) address, P. J. H. Jones, Sch. of Dietetics & Human Nutr., 21 111 Lakeshore Rd., Ste-Anne-de-Bellevue, Que. H9X 3V9, Canada. E-mail jonesp(a)macdonald.mcgill.ca
SO International Journal of Obesity, (2003), 27 (1) 95-102, 32 ref.
ISSN: 0307-0565
DT Journal
LA English
AB Effects of long-term consumption of medium chain triglycerides (**MCT**) vs. long chain triglycerides (LCT) on energy expenditure (EE), substrate oxidation and body composition were studied using 17 healthy obese women in a randomized, crossover trial. Meals were prepared and consumed for 2 periods of 27 days. Diets containing 40% of energy as fat, with treatment fat comprising 75% of the total fat, were designed to supply each subject with their individual weight-maintaining energy needs. The **MCT** diet contained 67% of treatment fat as **MCT** oil (49% octonoate, 50% decanoate), whereas the LCT diet contained exclusively beef tallow as treatment fat. Body composition was assessed by magnetic resonance imaging (MRI) on day 1 and 28 of each phase, while energy expenditure was measured on days 2 and 27. Results showed that long-term consumption of **MCT** enhances EE and fat oxidation in obese women, when compared to LCT consumption. The difference in body composition change between **MCT** and LCT consumption, although not statistically different, was consistent with differences predicted by the shifts in EE. It is concluded that substitution of **MCT** for LCT in a targeted energy balance diet may prevent long-term weight gain via increased EE.
CC A (Food Sciences)
CT DIET; DISEASES; POPULATION GROUPS; TRIGLYCERIDES; **OBESITY**; WOMEN

L2 ANSWER 3 OF 3 FSTA COPYRIGHT 2005 IFIS on STN
AN 2002:A0876 FSTA
TI Physiological effects of medium-chain triglycerides: potential agents in the prevention of **obesity.**
AU St-Onge, M. P.; Jones, P. J. H.
CS Correspondence (Reprint) address, P. J. H. Jones, Sch. of Dietetics & Human Nutr., McGill Univ., Ste-Anne-de-Bellevue, Que. H9X 3V9, Canada. E-mail jonesp(a)macdonald.mcgill.ca
SO Journal of Nutrition, (2002), 132 (3) 329-332, 29 ref.
ISSN: 0022-3166
DT General Review
LA English
AB Data examining the effects of dietary medium chain triacylglycerols (**MCT**) on energy expenditure and satiety are reviewed to assess the potential efficacy of **MCT** in the prevention of **obesity** . Aspects considered include: animal and human studies demonstrating increased energy expenditure with consumption of **MCT** compared with long chain triacylglycerols (LCT); effect of **MCT** on fat deposition; satiating properties of **MCT** as observed in both animal and human trials; hormones involved in the effect of **MCT** and LCT on satiety; and potential benefits on body weight of consuming **MCT** (may facilitate body weight control when included in the diet as a replacement for fats containing LCT).
CC A (Food Sciences)
CT HEALTH; HUMAN PHYSIOLOGY; REVIEWS; TRIGLYCERIDES; SATIETY; TRIACYLGLYCEROLS

=> s l1 and overweight
234 OVERWEIGHT

L3 2 L1 AND OVERWEIGHT

=> d l3 all

L3 ANSWER 1 OF 2 FSTA COPYRIGHT 2005 IFIS on STN
AN 2004:A0853 FSTA
TI Medium- versus long-chain triglycerides for 27 days increases fat oxidation and energy expenditure without resulting in changes in body composition in **overweight** women.
AU St-Onge, M. P.; Bourque, C.; Jones, P. J. H.; Ross, R.; Parsons, W. E.
CS Correspondence (Reprint) address, P. J. H. Jones, Sch. of Dietetics & Human Nutr., 21 111 Lakeshore Rd., Ste-Anne-de-Bellevue, Que. H9X 3V9, Canada. E-mail jonesp(a)macdonald.mcgill.ca
SO International Journal of Obesity, (2003), 27 (1) 95-102, 32 ref.
ISSN: 0307-0565
DT Journal
LA English
AB Effects of long-term consumption of medium chain triglycerides (**MCT**) vs. long chain triglycerides (LCT) on energy expenditure (EE), substrate oxidation and body composition were studied using 17 healthy obese women in a randomized, crossover trial. Meals were prepared and consumed for 2 periods of 27 days. Diets containing 40% of energy as fat, with treatment fat comprising 75% of the total fat, were designed to supply each subject with their individual weight-maintaining energy needs. The **MCT** diet contained 67% of treatment fat as **MCT** oil (49% octonoate, 50% decanoate), whereas the LCT diet contained exclusively beef tallow as treatment fat. Body composition was assessed by magnetic resonance imaging (MRI) on day 1 and 28 of each phase, while energy expenditure was measured on days 2 and 27. Results showed that long-term consumption of **MCT** enhances EE and fat oxidation in obese women, when compared to LCT consumption. The difference in body composition change between **MCT** and LCT consumption, although not statistically different, was consistent with differences predicted by the shifts in EE. It is concluded that substitution of **MCT** for LCT in a targeted energy balance diet may prevent long-term weight gain via increased EE.
CC A (Food Sciences)
CT DIET; DISEASES; POPULATION GROUPS; TRIGLYCERIDES; OBESITY; WOMEN

=> d l1 ti 1-00
'1-00' IS NOT A VALID FORMAT FOR FILE 'FSTA'

The following are valid formats:

IALL --------- ALL, indented with text labels
DALL --------- ALL, delimited (end of each field identified)
IBIB --------- BIB, indented with text labels
BIB ---- AN, TI, AU, CS, SO, PI, PRAI, DT, LA,SL
ABS ---- AN, AB
IND ---- AN, CC, IT
ALL ---- AN, TI, AU, CS, SO, PI, PRAI, DT, LA, SL, AB, CC, IT
TRIAL -- AN, TI, CC
HIT ---- ALL FIELDS CONTAINING HIT TERMS
KWIC --- ALL HIT TERMS PLUS 20 WORDS ON EITHER SIDE
OCC ---- LIST OF DISPLAY FIELDS CONTAINING HIT TERMS
HIT TERMS WILL BE HIGHLIGHTED IN ALL DISPLAYABLE FIELDS
EXCEPT MAPC.
TO DISPLAY A PARTICULAR FIELD OR FIELDS, ENTER THE DISPLAY FIELD CODES. FOR A LIST OF DISPLAY FIELD CODES, ENTER 'HELP DFIELDS' AT AN ARROW PROMPT (=>). EXAMPLES OF FORMATS INCLUDE: 'BIB'; 'TI'; 'AU,SO'. YOU MAY SPECIFY THE FORMAT FIELDS IN ANY ORDER, AND THE INFORMATION WILL BE DISPLAYED IN THE SAME ORDER AS THE FORMAT SPECIFICATION.
THE SAME FORMATS (EXCEPT FOR HIT, KWIC, AND OCC) MAY BE USED WITH

THE DISPLAY ACC COMMAND TO DISPLAY THE RECORD FOR A SPECIFIED
ACCESSION NUMBER.
ENTER DISPLAY FORMAT (BIB):1
'1' IS NOT A VALID FORMAT FOR FILE 'FSTA'

The following are valid formats:

IALL --------- ALL, indented with text labels
DALL --------- ALL, delimited (end of each field identified)
IBIB --------- BIB, indented with text labels
BIB ---- AN, TI, AU, CS, SO, PI, PRAI, DT, LA,SL
ABS ---- AN, AB
IND ---- AN, CC, IT
ALL ---- AN, TI, AU, CS, SO, PI, PRAI, DT, LA, SL, AB, CC, IT
TRIAL -- AN, TI, CC
HIT ---- ALL FIELDS CONTAINING HIT TERMS
KWIC --- ALL HIT TERMS PLUS 20 WORDS ON EITHER SIDE
OCC ---- LIST OF DISPLAY FIELDS CONTAINING HIT TERMS
HIT TERMS WILL BE HIGHLIGHTED IN ALL DISPLAYABLE FIELDS
EXCEPT MAPC.
TO DISPLAY A PARTICULAR FIELD OR FIELDS, ENTER THE DISPLAY FIELD
CODES. FOR A LIST OF DISPLAY FIELD CODES, ENTER 'HELP DFIELDS'
AT AN ARROW PROMPT (=>). EXAMPLES OF FORMATS INCLUDE: 'BIB';
'TI'; 'AU,SO'. YOU MAY SPECIFY THE FORMAT FIELDS IN ANY ORDER,
AND THE INFORMATION WILL BE DISPLAYED IN THE SAME ORDER AS THE
FORMAT SPECIFICATION.
THE SAME FORMATS (EXCEPT FOR HIT, KWIC, AND OCC) MAY BE USED WITH
THE DISPLAY ACC COMMAND TO DISPLAY THE RECORD FOR A SPECIFIED
ACCESSION NUMBER.
ENTER DISPLAY FORMAT (BIB):bib

L1 ANSWER 1 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2005:N0048 FSTA
TI Low viscosity structured lipid pan release compositions and methods.
IN Dilip K. Nakhasi; Daniels, R. L.
PA Bunge Foods Corp.; Bunge Foods, Bradley, IL, USA
SO United States Patent, (2004)
PI US 6793959 B2
PRAI US @@@@-100449 20020318
DT Patent
LA English

=> d l1 bib 2-99

L1 ANSWER 2 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2005:A0255 FSTA
TI Microbial metabolites of ingested caffeic acid are absorbed by the monocarboxylic acid transporter (**MCT**) in intestinal Caco-2 cell monolayers.
AU Konishi, Y.; Kobayashi, S.
CS Applied Biores. Cent., Res. & Dev. Dep., Kirin Brewery Co. Ltd., 3 Miyaharacho, Takasaki-shi, Gunma 370-1295, Japan. Tel. +81-27-346-9441. Fax +81-27-346-9985. E-mail konishiy(a)kirin.co.jp
SO Journal of Agricultural and Food Chemistry, (2004), 52 (21) 6418-6424, 40 ref.
ISSN: 0021-8561
DT Journal
LA English

L1 ANSWER 3 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2005:A0011 FSTA
TI Effects of a **medium chain triglyceride** oil mixture and α-lipoic acid diet on body composition, antioxidant status, and plasma lipid levels in the Golden Syrian hamster.

AU Wollin, S. D.; Yanwen Wang; Kubow, S.; Jones, P. J. H.
CS Correspondence (Reprint) address, P. J. H. Jones, Sch. of Dietetics & Human Nutr., McGill Univ., Ste-Anne-de-Bellevue, Que. H9X 3V9, Canada. Tel. (514) 398-7841. Fax (514) 398-7739. E-mail jonesp(a)macdonald.mcgill.ca
SO Journal of Nutritional Biochemistry, (2004), 15 (7) 402-410, 68 ref. ISSN: 0955-2863
DT Journal
LA English

L1 ANSWER 4 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2004:T0168 FSTA
TI Characteristics of modified β-cyclodextrin bound to cellulose powder.
AU Rehmann, L.; Yoshii, H.; Furuta, T.
CS Correspondence (Reprint) address, T. Furuta, Dep. of Biotech., Tottori Univ., Tottori 680-8552, Japan. Tel. +81-857-31-5273. Fax +81-857-31-0881. E-mail takeshi(a)bio.tottori-u.ac.jp
SO Starch/Staerke, (2003), 55 (7) 313-318, 21 ref. ISSN: 0038-9056
DT Journal
LA English

L1 ANSWER 5 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2004:N0890 FSTA
TI Enzymatic synthesis of medium-chain triacylglycerols by alcoholysis and interesterification of copra oil using a crude papain lipase preparation.
AU Caro, Y.; Turon, F.; Villeneuve, P.; Pina, M.; Graille, J.
CS Correspondence (Reprint) address, P. Villeneuve, UMR IATE, CIRAD/AMIS, Lab. de Lipotech., TA 40/16, 73 Rue JF Breton, F-34398 Montpellier Cedex 5, France. Tel. +33-4-67615518. Fax +33-4-67615515. E-mail pierre.villeneuve(a)cirad.fr
SO European Journal of Lipid Science and Technology, (2004), 106 (8) 503-512 ISSN: 1438-7697
DT Journal
LA English

L1 ANSWER 6 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2004:N0765 FSTA
TI Low-residue, easy-cleaning and low-viscosity structured lipid pan release compositions and methods.
IN Teran, P. L.; Dilip K. Nakhasi; Shuman, H. W.; Daniels, R. L.
PA Teran, Bourbonnais, IL, USA
SO United States Patent Application Publication, (2004)
PI US 2004115332 A1
PRAI US @@@@-100449 20020318
DT Patent
LA English

L1 ANSWER 7 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2004:N0459 FSTA
TI Effects of ingestion of margarine containing medium-chain triglycerides for 4 weeks on blood parameters and postprandial thermogenesis.
AU Nosaka, N.; Suzuki, Y.; Maki, H.; Haruna, H.; Ohara, A.; Kasai, M.; Tsuji, H.; Aoyama, T.; Okazaki, M.; Kondo, K.
CS Div. of Healthcare Sci., Res. Lab., Nisshin Oillio, Ltd., 1 Shinmei-cho, Yokosuka, Kanagawa 239-0832, Japan. E-mail n-nosaka(a)nisshin.oilliogroup.com
SO Journal of Oleo Science, (2003), 52 (11) 571-581, 31 ref. ISSN: 1345-8957
DT Journal
LA English

L1 ANSWER 8 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2004:N0227 FSTA
TI Effect of medium-chain triglycerides on postprandial concentrations of

remnant-like particles in healthy men.
AU Kasai, M.; Maki, H.; Suzuki, Y.; Nosaka, N.; Aoyama, T.; Inuzuka, H.; Okazaki, M.; Igarashi, O.; Kondo, K.
CS Div. of Healthcare Sci. Res. Lab., Nisshin Oil Mills, Ltd., 1 Shinmei-cho, Yokosuka, Kanagawa 239-0832, Japan. E-mail m-kasai(a)nisshin.oilliogroup.com
SO Journal of Oleo Science, (2003), 52 (4) 197-204, 28 ref.
ISSN: 1345-8957
DT Journal
LA English

L1 ANSWER 9 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2004:H0734 FSTA
TI Tea polyphenols inhibit the transport of dietary phenolic acids mediated by the monocarboxylic acid transporter (**MCT**) in intestinal Caco-2 cell monolayers.
AU Konishi, Y.; Kobayashi, S.; Shimizu, M.
SO Journal of Agricultural and Food Chemistry, (2003), 51 (25) 7296-7302, 30 ref.
ISSN: 0021-8561
DT Journal
LA English

L1 ANSWER 10 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2004:A1475 FSTA
TI Effects of medium-chain fatty acids and oleic acid on blood lipids, lipoproteins, glucose, insulin, and lipid transfer protein activities.
AU Tholstrup, T.; Ehnholm, C.; Jauhiainen, M.; Petersen, M.; Hoy, C. E.; Lund, P.; Sandstrom, B.
CS Res. Dep. of Human Nutr., Royal Vet. & Agric. Univ., Frederiksberg DK-1958, Denmark. E-mail tine.tholstrup(a)fhe.kvl.dk
SO American Journal of Clinical Nutrition, (2004), 79 (4) 564-569, 45 ref.
ISSN: 0002-9165
DT Journal
LA English

L1 ANSWER 11 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2004:A1356 FSTA
TI Intestinal absorption of p-coumaric and gallic acids in rats after oral administration.
AU Konishi, Y.; Hitomi, Y.; Yoshioka, E.
CS Applied Biores. Cent., Res. & Dev. Dep., Kirin Brewery Co. Ltd., 3 Miyaharacho, Takasaki-shi, Gunma 370-1295, Japan. Tel. +81-27-346-9441. Fax +81-27-346-9985. E-mail konishiy(a)kirin.co.jp
SO Journal of Agricultural and Food Chemistry, (2004), 52 (9) 2527-2532, 34 ref.
ISSN: 0021-8561
DT Journal
LA English

L1 ANSWER 12 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2004:A1355 FSTA
TI Transepithelial transport of chlorogenic acid, caffeic acid, and their colonic metabolites in intestinal Caco-2 cell monolayers.
AU Konishi, Y.; Kobayashi, S.
CS Applied Biores. Cent., Res. & Dev. Dep., Kirin Brewery Co. Ltd., 3 Miyaharacho, Takasaki-shi, Gunma 370-1295, Japan. Tel. +81-27-346-9441. Fax +81-27-346-9985. E-mail konishiy(a)kirin.co.jp
SO Journal of Agricultural and Food Chemistry, (2004), 52 (9) 2518-2526, 49 ref.
ISSN: 0021-8561
DT Journal
LA English

L1 ANSWER 13 OF 99 FSTA COPYRIGHT 2005 IFIS on STN

AN 2004:A0853 FSTA
TI Medium- versus long-chain triglycerides for 27 days increases fat oxidation and energy expenditure without resulting in changes in body composition in overweight women.
AU St-Onge, M. P.; Bourque, C.; Jones, P. J. H.; Ross, R.; Parsons, W. E.
CS Correspondence (Reprint) address, P. J. H. Jones, Sch. of Dietetics & Human Nutr., 21 111 Lakeshore Rd., Ste-Anne-de-Bellevue, Que. H9X 3V9, Canada. E-mail jonesp(a)macdonald.mcgill.ca
SO International Journal of Obesity, (2003), 27 (1) 95-102, 32 ref.
ISSN: 0307-0565
DT Journal
LA English

L1 ANSWER 14 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2003:P1290 FSTA
TI In vitro stability of β-galactosidase microcapsules.
AU Kwak, H. S.; Kwon, S. H.; Lee, J. B.; Ahn, J.
CS Dep. of Food Sci. & Tech., Sejong Univ., Seoul 143-747, Korea. Tel. +82 2 3408 3226. Fax +82 2 497 8931. E-mail kwakhs(a)sejong.ac.kr
SO Asian-Australasian Journal of Animal Sciences, (2002), 15 (12) 1808-1812, 23 ref.
ISSN: 1011-2367
DT Journal
LA English

L1 ANSWER 15 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2003:P0572 FSTA
TI Experimental and modeling studies showing the effect of lipid type and level on flavor release from milk-based liquid emulsions.
AU Roberts, D. D.; Pollien, P.; Watzke, B.
CS Nestle Res. Cent., Vers Chez les Blanc, PO Box 44, 1000 Lausanne 26, Switzerland. Tel. 41 21 7858172. Fax 41 21 7858554. E-mail Deborah.Roberts(a)rdls.nestle.com
SO Journal of Agricultural and Food Chemistry, (2003), 51 (1) 189-195, 28 ref.
ISSN: 0021-8561
DT Journal
LA English

L1 ANSWER 16 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2003:N0737 FSTA
TI Consumption of a functional oil rich in phytosterols and **medium-chain triglyceride** oil improves plasma lipid profiles in men.
AU St-Onge, M. P.; Lamarche, B.; Mauger, J. F.; Jones, P. J. H.
CS Correspondence (Reprint) address, P. J. H. Jones, Sch. of Dietetics & Human Nutr., McGill Univ., Ste-Anne-de-Bellevue, Que. H9X 3V9, Canada. E-mail jonesp(a)macdonald.mcgill.ca
SO Journal of Nutrition, (2003), 133 (6) 1815-1820, 45 ref.
ISSN: 0022-3166
DT Journal
LA English

L1 ANSWER 17 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2003:N0180 FSTA
TI Biological value of Silybum marianum.
AU Gilmiyarova, F. N.; Tutelyan, V. A.; Radomskaya, V. M.; Gapparov, M. M.; Kusnetchova, O. Yu.; Babichev, A. V.; Kretova, L. G.; Vinogradova, L. N.; Baisheva, G. M.; Gilmiyarov, E. M.; Kleyman, M. S.; Gergel, N. I.; Vandishev, V. V.; Gil'miyarov, F. N.; Tutel'yan, V. A.; Kuznetsova, O. Yu.; Gil'miyarov, E. M.; Kleiman, M. S.; Gergel', N. I.; Vandyshev, V. V.
CS Saratovskii Gosudarstvennyi Meditsinskii Univ., Saratov, Russia
SO Voprosy Pitaniya, (2002), 71 (4) 32-35, 18 ref.
ISSN: 0042-8833
DT Journal

LA Russian
SL English

L1 ANSWER 18 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2003:N0177 FSTA
TI Effects of dietary medium-chain triacylglycerols on serum lipoproteins and biochemical parameters in healthy men.
AU Nosaka, N.; Kasai, M.; Nakamura, M.; Takahashi, I.; Itakura, M.; Takeuchi, H.; Aoyama, T.; Tsuji, H.; Okazaki, M.; Kondo, K.
CS Div. of Healthcare Sci. Res. Lab., Nisshin Oil Mills Ltd., 1 Shinmeicho, Yokosuka, Kanagawa 239-0832, Japan. Fax +81-468-37-2509. E-mail Naohisa.Nosaka(a)nisshin-seiyu.co.jp
SO Bioscience, Biotechnology, and Biochemistry, (2002), 66 (8) 1713-1718, 25 ref.
ISSN: 0916-8451
DT Journal
LA English

L1 ANSWER 19 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2003:A1081 FSTA
TI [Medium-chain triglycerides: suitable for weight control?]
AU Feldheim, W.
CS Inst. fuer Humanernaehrung und Lebensmittelkunde, Christian-Albrechts-Univ. zu Kiel, 24105 Kiel, Germany
SO Ernaehrungs-Umschau, (2003), 50 (1) 4-8, 30 ref.
ISSN: 0014-021X
DT Journal
LA German

L1 ANSWER 20 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2002:N0823 FSTA
TI New `designer' oil closer to market?
AU Watkins, C.
SO INFORM, (2002), 13 (8) 631
ISSN: 0897-8026
DT Journal
LA English

L1 ANSWER 21 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2002:N0355 FSTA
TI Variability in fatty acid and triacylglycerol composition of the oil of coconut (Cocos nucifera L.) hybrids and their parentals.
AU Laureles, L. R.; Rodriguez, F. M.; Reano, C. E.; Santos, G. A.; Laurena, A. C.; Mendoza, E. M. T.
CS Correspondence (Reprint) address, E. M. T. Mendoza, Inst. of Plant Breeding, Coll. of Agric., Univ. of the Philippines Los Banos, College 4031, Laguna, Philippines. E-mail emtm(a)laguna.net
SO Journal of Agricultural and Food Chemistry, (2002), 50 (6) 1581-1586, 17 ref.
ISSN: 0021-8561
DT Journal
LA English

L1 ANSWER 22 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2002:N0097 FSTA
TI How can we genetically engineer oilseed crops to produce high levels of medium-chain fatty acids?
AU Dehesh, K.
CS Calgene, 1920 Fifth St., Davis, CA 95616, USA. Tel. +1-530-792-2279. Fax +1-530-792-2478. E-mail katie.dehesh(a)monsanto.com
SO European Journal of Lipid Science and Technology, (2001), 103 (10) 688-697, 57 ref.
ISSN: 1438-7697
DT General Review
LA English

L1 ANSWER 23 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2002:A0876 FSTA
TI Physiological effects of medium-chain triglycerides: potential agents in the prevention of obesity.
AU St-Onge, M. P.; Jones, P. J. H.
CS Correspondence (Reprint) address, P. J. H. Jones, Sch. of Dietetics & Human Nutr., McGill Univ., Ste-Anne-de-Bellevue, Que. H9X 3V9, Canada. E-mail jonesp(a)macdonald.mcgill.ca
SO Journal of Nutrition, (2002), 132 (3) 329-332, 29 ref.
ISSN: 0022-3166
DT General Review
LA English

L1 ANSWER 24 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2002:A0197 FSTA
TI Acute effects of dietary fat composition on postprandial plasma bile acid and cholecystokinin concentrations in healthy premenopausal women.
AU Costarelli, V.; Sanders, T. A. B.
CS Sch. of Applied Sci., South Bank Univ., London SE1 0AA, UK. Fax +44 20 7815 7934. E-mail costarv(a)sbu.ac.uk
SO British Journal of Nutrition, (2001), 86 (4) 471-477, 25 ref.
ISSN: 0007-1145
DT Journal
LA English

L1 ANSWER 25 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2002:A0009 FSTA
TI Polyols, high pressure, and refractive indices equalization for improved stability of w/o emulsions for food applications.
AU Benichou, A.; Aserin, A.; Garti, N.
CS Correspondence (Reprint) address, N. Garti, Casali Inst. of Applied Chem., Hebrew Univ. of Jerusalem, 91904 Jerusalem, Israel. Fax 972-2-6520262. E-mail garti(a)vms.huji.ac.il
SO Journal of Dispersion Science and Technology, (2001), 22 (2/3) 269-280, 30 ref.
ISSN: 0193-2691
DT Journal
LA English

L1 ANSWER 26 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2001(09):T0867 FSTA
TI Effects of various oils on volatile compounds of deep-fried shallot flavouring.
AU Charng-Cherng Chyau; Jeng-Leun Mau
CS Correspondence (Reprint) address, Jeng-Leun Mau, Dep. of Food Sci., Nat. Chung-Hsing Univ., Taichung 40227, Taiwan. Tel. +886-4-2285-4313. Fax +886-4-2483-3508. E-mail jlmau(a)dragon.nchu.edu.tw
SO Food Chemistry, (2001), 74 (1) 41-46, 23 ref.
ISSN: 0308-8146
DT Journal
LA English

L1 ANSWER 27 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2001(09):A1685 FSTA
TI Improved oil solubilization in oil/water food grade microemulsions in the presence of polyols and ethanol.
AU Garti, N.; Yaghmur, A.; Leser, M. E.; Clement, V.; Watzke, H. J.
CS Casali Inst. of Applied Chem., Hebrew Univ. of Jerusalem, Jerusalem 91904, Israel. Tel. 972 2 6586574/5. Fax 972 2 6520262. E-mail garti(a)vms.huji.ac.il
SO Journal of Agricultural and Food Chemistry, (2001), 49 (5) 2552-2562, 37 ref.
ISSN: 0021-8561
DT Journal

LA English

L1 ANSWER 28 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2001(08):A1442 FSTA
TI Accelerated stability testing of a water-in-oil emulsion.
AU Bjerregaard, S.; Vermehren, C.; Soderberg, I.; Frokjaer, S.
CS Correspondence (Reprint) address, S. Frokjaer, Dep. of Pharmaceutics, Royal Danish Sch. of Pharmacy, Universitetsparken 2, DK-2100 Copenhagen O, Denmark. Fax 45 35 30 60 30. E-mail sf(a)mail.dfh.dk
SO Journal of Dispersion Science and Technology, (2001), 22 (1) 23-31, 21 ref.
ISSN: 0193-2691
DT Journal
LA English

L1 ANSWER 29 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2001(06):N0493 FSTA
TI Edible properties of Cuphea seed oil.
AU Saikusa, T.; Kitta, K.; Ohkawa, Y.; Fujii, Y.; Kouzai, S.; Mori, Y.
CS Nat. Agric. Res. Cent., Min. of Agric., Forestry & Fisheries, Tsukuba-shi, Ibaraki 305-8666, Japan
SO Journal of the Japanese Society for Food Science and Technology (Nippon Shokuhin Kagaku Kogaku Kaishi), (2001), 48 (3) 210-213, 17 ref.
ISSN: 1341-027X
DT Journal
LA Japanese
SL English

L1 ANSWER 30 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2001(03):B0391 FSTA
TI Production of structured lipids by lipase-catalysed interesterification in an ultrafiltration membrane reactor.
AU Xuebing Xu; Skands, A.; Jonsson, G.; Adler-Nissen, J.
CS Dep. of Biotech., Tech. Univ. of Denmark, DK-2800 Lyngby, Denmark. Fax +45 45884922. E-mail xx(a)ibt.dtu.dk
SO Biotechnology Letters, (2000), 22 (21) 1667-1671, 9 ref.
ISSN: 0141-5492
DT Journal
LA English

L1 ANSWER 31 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2000(09):K0251 FSTA
TI Method of reducing fat in fat-based coating for confectionery products.
IN Shandra Chandrasekaran Nalur
PA Nestec SA; Nestec, Vevey, Switzerland
SO United States Patent, (2000)
PI US 6060094
PRAI US @@@@-182928 19981030
DT Patent
LA English

L1 ANSWER 32 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2000(06):N0279 FSTA
TI Review of the toxicologic properties of medium-chain triglycerides.
AU Traul, K. A.; Driedger, A.; Ingle, D. L.; Nakhasi, D.
CS Ingle & Traul Pharmaceutical Consulting Inc., PO Box 2152, Princeton, NJ 08543, USA. Tel. (609) 219-9497. Fax (609) 844-0757. E-mail katraul(a)aol.com
SO Food and Chemical Toxicology, (2000), 38 (1) 79-98, many ref.
ISSN: 0278-6915
DT General Review
LA English

L1 ANSWER 33 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2000(06):B0974 FSTA

TI Transesterification reaction between medium- and long-chain fatty acid triglycerides using surfactant-modified lipase.
AU Mogi, K.; Nakajima, M.; Mukataka, S.
CS Correspondence (Reprint) address, M. Nakajima, Nat. Food Res. Inst., MAFF, 2-1-2 Kannondai, Tsukuba, Ibaraki, 305-8642 Japan. Tel. +81-298 38 8025. Fax +81-298 38 8122
SO Biotechnology and Bioengineering, (2000), 67 (5) 513-519, 9 ref.
ISSN: 0006-3592
DT Journal
LA English

L1 ANSWER 34 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2000(06):A0859 FSTA
TI Quantitative determination of triacylglycerol profile of structured lipid by capillary supercritical fluid chromatography and high-temperature gas chromatography.
AU Lee, T. W.; Hastilow, C. I.
CS Ross Product Div., Abbott Laboratories, 625 Cleveland Ave., Columbus, OH 43215, USA. E-mail theresa.lee(a)rossnutrition.com
SO Journal of the American Oil Chemists' Society, (1999), 76 (12) 1405-1413, 32 ref.
ISSN: 0003-021X
DT Journal
LA English

L1 ANSWER 35 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2000(06):A0857 FSTA
TI Stability determination of soy lecithin-based emulsions by Fourier transform infrared spectroscopy.
AU Whittinghill, J. M.; Norton, J.; Proctor, A.
CS Correspondence (Reprint) address, A. Proctor, Dep. of Food Sci., Univ. of Arkansas, Fayetteville, AR 72704, USA. E-mail aproctor(a)comp.uark.edu
SO Journal of the American Oil Chemists' Society, (2000), 77 (1) 37-42, 5 ref.
ISSN: 0003-021X
DT Journal
LA English

L1 ANSWER 36 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2000(04):A0537 FSTA
TI Dietary energy value of medium-chain triglycerides.
AU Ingle, D. L.; Driedger, A.; Traul, K. A.; Nakhasi, D. K.
CS Ingle & Traul Pharmaceutical Consulting Inc., PO Box 2152, Princeton, NJ 08543, USA. E-mail dlingle7(a)aol.com
SO Journal of Food Science, (1999), 64 (6) 960-963, 30 ref.
ISSN: 0022-1147
DT Journal
LA English

L1 ANSWER 37 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2000(02):A0215 FSTA
TI Lipidemic effects of an interesterified mixture of butter, medium-chain triacylglycerol and safflower oils.
AU Mascioli, E. A.; McLennan, C. E.; Schaefer, E. J.; Lichtenstein, A. H.; Hoy, C. E.; Christensen, M. S.; Bistrian, B. R.
CS PAREXEL International Corp., 200 West St., Waltham, MA 02451-1163, USA. E-mail Edward.mascioli(a)parexel.com
SO Lipids, (1999), 34 (9) 889-894, 36 ref.
ISSN: 0024-4201
DT Journal
LA English

L1 ANSWER 38 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 2000(02):A0198 FSTA
TI Mechanisms mediating lipoprotein responses to diets with **medium**-

chain triglyceride and lauric acid.
AU Yu-Hwai Tsai; Sunmin Park; Kovacic, J.; Snook, J. T.
CS Correspondence (Reprint) address, J. T. Snook, Dep. of Human Nutr. & Food Management, Ohio State Univ., Columbus, OH 43210, USA. E-mail snook.3(a)osu.edu
SO Lipids, (1999), 34 (9) 895-905, 52 ref.
ISSN: 0024-4201
DT Journal
LA English

L1 ANSWER 39 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1999(09):A1553 FSTA
TI Comparison of the effect of medium-chain and long-chain triacylglycerols on calcium absorption in healthy subjects.
AU Griessen, M.; Ammann, P.; Selz, L.; Bartholdi, P.; Arnaud, M. J.; Bonjour, J. P.
CS Correspondence (Reprint) address, M. J. Arnaud, Perrier Vittel Water Inst., BP 101, Vittel Cedex 04, France. E-mail instieau(a)worldnet.fr
SO American Journal of Clinical Nutrition, (1999), 69 (6) 1237-1242, 28 ref.
ISSN: 0002-9165
DT Journal
LA English

L1 ANSWER 40 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1999(05):M0481 FSTA
TI Grain sorghum wax as an edible coating for gelatin-based candies.
AU Weller, C. L.; Gennadios, A.; Saraiva, R. A.; Cuppett, S. L.
CS Dep. of Biol. Systems Eng., Univ. of Nebraska, Lincoln, NE 68583-0726, USA. Tel. (402)472-9337. E-mail cweller(a)foodsci.unl.edu
SO Journal of Food Quality, (1998), 21 (2) 117-128, 20 ref.
ISSN: 0146-9428
DT Journal
LA English

L1 ANSWER 41 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1999(04):A0447 FSTA
TI Production of specific-structured triacylglycerols by lipase-catalyzed interesterification in a laboratory-scale continuous reactor.
AU Mu, H.; Xu, X.; Hoy, C. E.
CS Dep. of Biochem. & Nutr., Tech. Univ. of Denmark, DK-2800 Lyngby, Denmark. E-mail mu(a)mimer.be.dtu.dk
SO Journal of the American Oil Chemists' Society, (1998), 75 (9) 1187-1193, 28 ref.
ISSN: 0003-021X
DT Journal
LA English

L1 ANSWER 42 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1998(07):H1266 FSTA
TI Energy drink.
IN Gordeladze, J. O
PA Gordeladze, N-1344 Haslum, Norway
SO PCT International Patent Application, (1997)
PI WO 9749304
PRAI NO 1996-2728 19960627
DT Patent
LA English

L1 ANSWER 43 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1998(03):T0168 FSTA
TI Determination of medium-chain triglycerides in flavor preparations by GC and GC/CI-MS.
AU Uematsu, Y.; Sadamasu, Y.; Hirata, K.; Hirokado, M.; Yasuda, K.; Suzuki, S.
CS Tokyo Metropolitan Res. Lab. of Public Health: 3-24-1, Hyakunin-cho,

Shinjuku-ku, Tokyo 169, Japan
SO Journal of the Food Hygienic Society of Japan (Shokuhin Eiseigaku Zasshi), (1997), 38 (3) 140-144, 12 ref.
ISSN: 0015-6426
DT Journal
LA Japanese
SL English

L1 ANSWER 44 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1997(12):R0086 FSTA
TI Growth and fatty acid composition of juvenile leader prawns, Penaeus monodon, fed different lipids.
AU Deering, M. J.; Fielder, D. R.; Hewitt, D. R.
CS Zool. Dep., Univ. of Queensland, St. Lucia, Qld. 4072, Australia
SO Aquaculture, (1997), 151 (1/4) 131-141, many ref.
ISSN: 0044-8486
DT Journal
LA English

L1 ANSWER 45 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1997(10):S0103 FSTA
TI Tocopherol effects on frozen ground pork color.
AU Sprouls, G. K.; Brewer, M. S.
CS Correspondence (Reprint) address, M. S. Brewer, Dep. of Food Sci. & Human Nutr., Univ. of Illinois, Urbana, IL 61801, USA. Tel. 217-244-2867. E-mail mirandab(a)vmd.cso.uiuc.edu
SO Journal of Food Quality, (1997), 20 (1) 1-15, 23 ref.
ISSN: 0146-9428
DT Journal
LA English

L1 ANSWER 46 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1997(09):N0044 FSTA
TI Medium-chain fatty acid-rich glycerides by chemical and lipase-catalyzed polyester-monoester interchange reaction.
AU Ghosh, S.; Bhattacharyya, D. K.
CS Correspondence (Reprint) address, D. K. Bhattacharyya, Dep. of Chem. Tech., Univ. Coll. of Sci. & Tech., Calcutta Univ., Calcutta 700 009, India
SO Journal of the American Oil Chemists' Society, (1997), 74 (5) 593-595, 12 ref.
ISSN: 0003-021X
DT Journal
LA English

L1 ANSWER 47 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1997(06):K0020 FSTA
TI Comestibles containing stabilized highly odorous flavor component delivery systems.
IN Cherukuri, S. R.; Battist, G. E.; Zamudio-Tena, J. F.
PA Fuisz Technologies Ltd.; Fuisz Technologies, Chantilly, VA, USA
SO United States Patent, (1996)
PI US 5556652
PRAI US @@@@-286286 19940805
DT Patent
LA English

L1 ANSWER 48 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1997(03):S0093 FSTA
TI Characteristics of low-fat, high added-water frankfurters manufactured with preblends of connective tissue and alkaline phosphate.
AU Calhoun, C. M.; Eilert, S. J.; Mandigo, R. W.
CS Correspondence (Reprint) address, R. W. Mandigo, A213 Animal Sci., Univ. of Nebraska, PO Box 830908, Lincoln, NE 68583-0908, USA. Tel. (402) 472-6456. Fax (402) 472-6362

SO Journal of Muscle Foods, (1996), 7 (4) 471-487, 33 ref.
ISSN: 1046-0756
DT Journal
LA English

L1 ANSWER 49 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1997(01):N0051 FSTA
TI Technological evolution of medium chain triglycerides for flavor applications.
AU Nakhasi, D. K.; Heydinger, J. A.; Bradley, D. G.
CS United States of America, Institute of Food Technologists 1996 Annual Meeting; Food Ingredients Dep., Stepan Co., 100 West Hunter Ave., Maywood, NJ 07607, USA
SO (1996), 1996 IFT annual meeting: book of abstracts, p. 70 ISSN 1082-1236
ISSN: 1082-1236
DT Conference
LA English

L1 ANSWER 50 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1996(10):S0159 FSTA
TI Connective tissue/acidic phosphate preblend effects on reduced fat frankfurters.
AU Calhoun, C. M.; Eilert, S. J.; Mandigo, R. W.
CS Correspondence (Reprint) address, R. W. Mandigo, Dep. of Animal Sci., A213, Univ. of Nebraska-Lincoln, PO Box 830908, Lincoln, NE 68583-0908, USA
SO Journal of Food Science, (1996), 61 (2) 459-464, 40 ref.
ISSN: 0022-1147
DT Journal
LA English

L1 ANSWER 51 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1996(09):N0040 FSTA
TI Two novel thioesterases are key determinants of the bimodal distribution of acyl chain length of Cuphea palustris seed oil.
AU Dehesh, K.; Edwards, P.; Hayes, T.; Cranmer, A. M.; Fillatti, J.
CS Oils Div., Calgene Inc., 1920 Fifth St., Davis, CA 95616, USA. Fax 1-916-753-1510. E-mail dehesh(a)calgene.com
SO Plant Physiology, (1995), 110 (1) 203-210, 27 ref.
ISSN: 0032-0889
DT Journal
LA English

L1 ANSWER 52 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1996(08):A0066 FSTA
TI Covert manipulation of the ratio of medium- to long-chain triglycerides in isoenergetically dense diets: effect on food intake in ad libitum feeding men.
AU Stubbs, R. J.; Harbron, C. G.
CS Rowett Res. Inst., Greenburn Rd., Bucksburn, Aberdeen AB2 9SB, UK. E-mail rjss(a)rri.sari.ac.uk
SO International Journal of Obesity, (1996), 20 (5) 435-444, 46 ref.
ISSN: 0307-0565
DT Journal
LA English

L1 ANSWER 53 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1996(05):R0024 FSTA
TI Coconut oil and beef tallow, but not tricaprylin, can replace menhaden oil in the diet of red drum (Sciaenops ocellatus) without adversely affecting growth or fatty acid composition.
AU Craig, S. R.; Gatlin, D. M., III
CS Correspondence (Reprint) address, Gatlin, D. M., III, Dep. of Wildlife & Fisheries Sci., Texas A&M Univ. System, College Station, TX 77843, USA
SO Journal of Nutrition, (1995), 125 (12) 3041-3048, 28 ref.

ISSN: 0022-3166
DT Journal
LA English

L1 ANSWER 54 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1996(01):M0063 FSTA
TI Levels of medium-chain triglycerides and their energy value.
AU Ranhotra, G. S.; Gelroth, J. A.; Glaser, B. K.
CS American Inst. of Baking, Manhattan, KS, USA
SO Cereal Chemistry, (1995), 72 (4) 365-367, 11 ref.
ISSN: 0009-0352
DT Journal
LA English

L1 ANSWER 55 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1995(11):S0116 FSTA
TI Alpha tocopherol effects on pigment and lipid oxidation in frozen ground pork.
AU Sprouls, G. K.; Brewer, M. S.
CS IFT Annual Meeting 1995; Div. of Foods & Nutr., Univ. of Illinois, Urbana, IL 61801, USA
SO (1995), p. 208
DT Conference
LA English

L1 ANSWER 56 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1995(09):P0084 FSTA
TI Enzyme linked immunosorbent assay (ELISA) and milk-clotting test (**MCT**) for determination of the affinity between chymosin and artificial casein micelles.
AU Larsson, K. I.; Andren, A.; Geurts, T. J.; Roos, A. L. de
CS Dep. of Food Sci., Swedish Univ. of Agric. Sci., Box 7051, S-750 07 Uppsala, Sweden
SO Netherlands Milk and Dairy Journal, (1995), 49 (1) 37-46, 18 ref.
ISSN: 0028-209X
DT Journal
LA English

L1 ANSWER 57 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1995(06):T0022 FSTA
TI Mechanical extraction of plant antioxidants by means of oils.
AU Aeschbach, R.; Baechler, R.; Rossi, P.; Sandoz, L.; Wille, H. J.
CS Nestec Ltd., Nestle Res. Cent., Vers-Chez-les Blanc, PO Box 44, CH-1000 Lausanne 26, Switzerland
SO Fett Wissenschaft Technologie, (1994), 96 (11) 441-443, 10 ref.
ISSN: 0931-5985
DT Journal
LA English
SL German

L1 ANSWER 58 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1995(06):S0132 FSTA
TI The effects of dietary lipid on poultry performance and composition.
AU Akiba, Y.; Murakami, H.; Park, J. H.; Senkoylu, N.; Kusanagi, M.; Takahashi, K.; Sato, K.
CS Dep. of Animal Sci., Tohoku Univ., Sendai 981, Japan
SO Proceedings of Australian Poultry Science Symposium, (1995), 7, 1-8, 27 ref.
ISSN: 1034-6260
DT Journal
LA English

L1 ANSWER 59 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1995(04):C0029 FSTA
TI Microbiological challenge testing for ensuring safety of food products.

AU Notermans, S.; Veld, P. in't
CS Nat. Inst. of Public Health & Environmental Protection, PO Box 1, 3720 BA Bilthoven, Netherlands
SO International Journal of Food Microbiology, (1994), 24 (1/2) 33-39, 4 ref.
ISSN: 0168-1605
DT Journal
LA English

L1 ANSWER 60 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1994(08):N0055 FSTA
TI Production and properties of medium-chain triglycerides.
AU Timmerman, F.
CS Gruenau GmbH, Robert-Hansen-Str. 1, D-89257, Illertissen, Germany
SO Lipid Technology, (1994), 6 (3) 61-64
ISSN: 0956-666X
DT Journal
LA English

L1 ANSWER 61 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1994(08):N0004 FSTA
TI A 91-day feeding study in rats with caprenin.
AU Webb, D. R.; Wood, F. E.; Bertram, T. A.; Fortier, N. E.
CS Procter & Gamble Co., Winton Hill Technical Cent., 6071 Center Hill Ave., Cincinnati, OH 45224-1703, USA
SO Food and Chemical Toxicology, (1993), 31 (12) 935-946, 72 ref.
ISSN: 0278-6915
DT Journal
LA English

L1 ANSWER 62 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1994(04):N0005 FSTA
TI [Strategies for substitution of fats in foods.]
AU Boatella, J.; Codony, R.; Rafecas, M.
CS Correspondence (Reprint) address, M. Rafecas, Unidad de Nutr. y Bromatologia, Fac. de Farmacia, Univ. de Barcelona, 08028 Barcelona, Spain
SO Alimentaria, (1993), No. 239, 27-31, 29 ref.
ISSN: 0300-5755
DT General Review
LA Spanish
SL English

L1 ANSWER 63 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1994(03):S0083 FSTA
TI Characteristics of low-fat frankfurters manufactured with modified beef connective tissue.
AU Eilert, S. J.; Blackmer, D. S.; Mandigo, R. W.; Calkins, C. R.
CS Correspondence (Reprint) address, R. W. Mandigo, Dep. of Animal Sci., Univ. of Nebraska-Lincoln, Lincoln, NE 68583-0908, USA
SO Journal of Muscle Foods, (1993), 4 (4) 269-289, 34 ref.
ISSN: 1046-0756
DT Journal
LA English

L1 ANSWER 64 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1993(12):S0130 FSTA
TI Meat batters manufactured with modified beef connective tissue.
AU Eilert, S. J.; Blackmer, D. S.; Mandigo, R. W.; Calkins, C. R.
CS Dep. of Animal Sci. (A213 Animal Science), PO Box 830908, Univ. of Nebraska-Lincoln, Lincoln, NE 68583-0908, USA
SO Journal of Food Science, (1993), 58 (4) 691-696, 30 ref.
ISSN: 0022-1147
DT Journal
LA English

L1 ANSWER 65 OF 99 FSTA COPYRIGHT 2005 IFIS on STN

AN 1993(06):G0007 FSTA
TI Saturated fatty acid chain length and positional distribution in infant formula: effects on growth and plasma lipids and ketones in piglets.
AU Innis, S. M.; Quinlan, P.; Diersen-Schade, D.
CS Dep. of Paediatrics, Univ. of British Columbia, Vancouver, BC V5Z 4H4, Canada
SO American Journal of Clinical Nutrition, (1993), 57 (3) 382-390, 44 ref.
ISSN: 0002-9165
DT Journal
LA English

L1 ANSWER 66 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1992(11):P0134 FSTA
TI [Application of hydrostatic pressure to yoghurt to prevent its after-acidification.]
AU Tanaka, T.; Hatanaka, K.
CS Snow Brand Milk Products Co. Ltd., Tech. Res. Inst., 1-2 Minamidai 1-chome, Kawagoe, Saitama 350, Japan
SO Journal of Japanese Society of Food Science and Technology [Nippon Shokuhin Kogyo Gakkaishi], (1992), 39 (2) 173-177, 6 ref.
ISSN: 0029-0394
DT Journal
LA Japanese
SL English

L1 ANSWER 67 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1992(09):S0195 FSTA
TI Characteristics of low-fat frankfurters manufactured with modified beef connective tissue.
In 'Proceedings, 44th Annual Reciprocal Meat Conference', Kansas, USA. 9-12 June, 1991. [See FSTA (1992) 24 9S41].
AU Eilert, S. J.; Blackmer, D. S.; Mandigo, R. W.; Calkins, C. R.; United States of America, American Meat Science Association [Reciprocal Meat Conference]
CS A213 Anim. Sci. Dep., Univ. of Nebraska, Lincoln, NE 68583-0908, USA
SO Proceedings, Annual Reciprocal Meat Conference of the American Meat Science Association, (1991), 44, 209
DT Conference
LA English

L1 ANSWER 68 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1992(08):R0022 FSTA
TI Effects of various level of dietary medium chain triglycerides on growth and lipid reservation in ayu.
AU Mustafa, M. G.; Nakagawa, H.; Ohya, S.; Shimizu, T.; Horikawa, Y.; Yamamoto, S.
CS Fac. of Applied Biol. Sci., Hiroshima Univ., Kagamiyama, Saijo, Higashi-hiroshima, Hiroshima 724, Japan
SO Bulletin of the Japanese Society of Scientific Fisheries [Nihon Suisan Gakkai-shi], (1991), 57 (12) 2327-2331, 21 ref.
ISSN: 0021-5392
DT Journal
LA English

L1 ANSWER 69 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1992(08):N0038 FSTA
TI Development of a process in the manufacture of medium chain triglycerides (**MCT**) from coconut oil. I. Optimization of the reaction parameters.
AU Viernes, C. H.; Binlayo, D. L.; Gonzales, A. L.; Arida, V. P.
CS Chem. & Minerals Div., Ind. Tech. Dev. Inst., Dep. of Sci. & Tech., Bicutan, Taguig, 1604 Metro Manila, Philippines
SO Philippine Journal of Coconut Studies, (1990), 15 (2) 4-9, 7 ref.
ISSN: 0115-3463
DT Journal

LA English

L1 ANSWER 70 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1992(08):N0003 FSTA
TI Quest for fat substitutes taking many routes.
AU Anon.
SO INFORM, (1991), 2 (2) 115, 118-119
ISSN: 0897-8026
DT Journal
LA English

L1 ANSWER 71 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1992(06):B0194 FSTA
TI Control and thermodynamics of microbial growth: rational tools for bioengineering.
AU Rutgers, M.; Van Dam, K.; Westerhoff, H. V.
CS Nat. Inst. of Public Health & Environmental Protection, Antonie van Leeuwenhoeklaan 9, Bilthoven, Netherlands
SO CRC Critical Reviews in Biotechnology, (1991), 11 (4) 367-395, 116 ref.
ISSN: 0738-8551
DT General Review
LA English

L1 ANSWER 72 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1992(04):N0015 FSTA
TI Structured lipids provide unique nutrition benefits.
AU Anon.
SO Food Engineering, (1991), 63 (2) 65
ISSN: 0193-323X
DT Journal
LA English

L1 ANSWER 73 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1992(02):N0005 FSTA
TI Structured lipids: fats of the future.
AU Kennedy, J. P.
CS Stepan Co., 100 W. Hunter Ave., Maywood, NJ 07607, USA
SO Food Technology, (1991), 45 (11) 76, 78, 80, 83, 9 ref.
ISSN: 0015-6639
DT Journal
LA English

L1 ANSWER 74 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1992(01):R0032 FSTA
TI Nutritional studies on improvement of fish quality in ayu Plecoglossus altivelis.
AU Nematipour, G. R.
CS Graduate School of Biosphere Sci., Hiroshima Univ., Higashi-Hiroshima 724, Japan
SO Journal of the Faculty of Applied Biological Science, Hiroshima University, (1990), 29 (1) 75-76
ISSN: 0387-7647
DT Dissertation
LA English

L1 ANSWER 75 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1992(01):A0087 FSTA
TI The nutrition revolution. II. Processors target diet and cancer connections.
AU Best, D.
CS Prepared Foods, Gorman Publishing Co., 8750 W. Bryn Mawr Ave., Chicago, IL 60631, USA
SO Prepared Foods, (1991), 160 (3) 40-41
ISSN: 0747-2536
DT Journal

LA English

L1 ANSWER 76 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1991(06):S0325 FSTA
TI [Effects of **medium chain triglyceride** on energy metabolism, growth and body fat in broilers.]
AU Chiang, S. H.; Huang, K. H.; Lee, H. F.
CS Dep. of Anim. Sci., Tunghai Univ., Taichung, Taiwan
SO Journal of the Chinese Society of Animal Science, (1990), 19 (1/2) 11-19, 24 ref.
DT Journal
LA Chinese
SL English

L1 ANSWER 77 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1991(06):P0066 FSTA
TI **Medium-chain-triglyceride** cheese.
AU Babayan, V. K.; Rosenau, J. R.
CS Nutr./Metabolism Lab., Harvard Med. School, New England Deaconess Hospital, Cancer Res. Inst., 194 Pilgrim Rd., Boston, MA 02215, USA
SO Food Technology, (1991), 45 (2) 111-114, 8 ref.
ISSN: 0015-6639
DT Journal
LA English

L1 ANSWER 78 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1991(06):N0021 FSTA
TI Medium-chain triglycerides: a nonconventional fat.
AU Megremis, C. J.
CS Henkel Corp., 5325 South 9th Ave., LaGrange, IL 60525-3602, USA
SO Food Technology, (1991), 45 (2) 108, 110, 114
ISSN: 0015-6639
DT Journal
LA English

L1 ANSWER 79 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1990(12):N0047 FSTA
TI **MCT**-oils in and around edible products.
AU Hvene, H. H.
CS DS Industries ApS, 24 Islands Brygge, 2300 Copenhagen, Denmark
SO European Food & Drink Review, (1990), Autumn, 81-82
ISSN: 0955-4416
DT Journal
LA English

L1 ANSWER 80 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1990(06):T0015 FSTA
TI On special release.
AU Bennett, R.; Timmermann, F.
CS Henkel Organics, 292-308 Southbury Rd., Enfield EN1 1TS, UK
SO Food, Flavourings, Ingredients, Packaging and Processing, (1989), 11 (7) 59, 61
ISSN: 0143-8441
DT Journal
LA English

L1 ANSWER 81 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1990(01):V0032 FSTA
TI Method of stably fixing aromatic coffee substance.
IN Osawa, H.
PA Ajinomoto General Foods Inc.; Ajinomoto General Foods, Tokyo, Japan
SO United States Patent, (1989)
PI US 4820543
PRAI JP 1986-168699 19860717
DT Patent

LA English

L1 ANSWER 82 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1989(07):A0017 FSTA
TI The effect of adsorbed lysozyme on interaction forces and coalescence of triglyceride droplets in aqueous salt solutions.
AU Fisher, L. R.; Mitchell, E. E.; Parker, N. S.
CS CSIRO Div. of Food Processing, PO Box 52, North Ryde, NSW 2113, Australia
SO Journal of Colloid and Interface Science, (1989), 128 (1) 35-46, 41 ref. ISSN: 0021-9797
DT Journal
LA English

L1 ANSWER 83 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1987(03):P0104 FSTA
TI Impaired clotting ability of milk in dairy cows in the north of Scotland.
AU Johnston, W. S.; Hopkins, G. F.; Maclachlan, G. K.
CS Vet. Investigation Lab., N. Scotland Coll. of Agric., Newlands of Geise, Thurso, Caithness, UK
SO Veterinary Record, (1986), 118 (23) 637, 4 ref.
DT Journal
LA English

L1 ANSWER 84 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1986(10):N0025 FSTA
TI Quantitative determination of medium chain triglycerides in infant formula by reverse phase HPLC.
AU Lee, T. W.
CS Ross Lab., 625 Cleveland Avenue, Columbus, Ohio 43216, USA
SO Journal of the American Oil Chemists' Society, (1986), 63 (3) 317-320, 11 ref.
DT Journal
LA English

L1 ANSWER 85 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1985(04):P0036 FSTA
TI Characterization of rennin-like enzyme produced in submerged culture of Aspergillus niger.
AU Foda, M. S.
CS Microbial Chem. Lab., Nat. Res. Cent., Dokki, Cairo, Egypt
SO Egyptian Journal of Microbiology, (1982), 17 (1/2) 105-114, 13 ref.
DT Journal
LA English
SL Arabic

L1 ANSWER 86 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1984(05):P1157 FSTA
TI Factors affecting the processing of wara - a Nigerian white cheese.
AU Ogundiwin, J. O.; Oke, O. L.
CS Dep. of Food Sci. & Tech., Univ. of Ife, Ile-Ife, Nigeria
SO Food Chemistry, (1983), 11 (1) 1-13, 13 ref.
DT Journal
LA English

L1 ANSWER 87 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1984(02):P0387 FSTA
TI Method of determining the activity of immobilized milk-coagulating enzyme.
AU Stal'naya, I. D.; Nakhapetyan, L. A.
CS All-Union Sci.-Res. Inst. of Bioeng., Moscow, USSR
SO Applied Biochemistry and Microbiology, (1981), 17 (1) 121-125, 9 ref.
DT Journal
LA English

L1 ANSWER 88 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1983(08):G0628 FSTA

TI Nutrient composition suitable for enteral or oral feeding.
IN Kashiwabara, N.; Maruyama, H.; Ishii, T.; Kondo, S.
PA Snow Brand Milk Products Co. Ltd.
SO UK Patent Application, (1982)
PI GB 2090115 A
DT Patent
LA English

L1 ANSWER 89 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1981(08):N0410 FSTA
TI [Cuphea, the first annual oil plant for the production of medium-chain triglycerides (**MCT**).]
Cuphea, die erste annuelle Oelpflanze fuer die Erzeugung von mittelkettigen Triglyceriden (**MCT**).
AU Hirsinger, F.
CS Inst. fuer Pflanzenbau & Pflanzenzuechtung der Univ. Goettingen, v.-Siebold-Strasse 8, 3400 Goettingen, Federal Republic of Germany
SO Fette Seifen Anstrichmittel, (1980), 82 (10) 385-389, 15 ref.
DT Journal
LA German
SL English

L1 ANSWER 90 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1981(07):G0478 FSTA
TI [Developments in baby food production in view of scientific nutritional requirements.]
AU Balla, F.
SO Konzerv- es Paprikaipar, (1980), No. 2, 54-56, 12 ref.
DT Journal
LA Hungarian
SL German; Russian

L1 ANSWER 91 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1981(07):G0464 FSTA
TI Nutritional properties of coconut oil: its use in filled milk.
AU Kaunitz, H.
CS Dep. of Path., Columbia Univ., New York, USA
SO Philippine Journal of Coconut Studies, (1979), 4 (3) 39-43, 20 ref.
DT Journal
LA English

L1 ANSWER 92 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1979(05):S0808 FSTA
TI Artificial rearing of pigs. VII. Medium chain triglycerides as a dietary source of energy and their effect on live-weight gain, feed:gain ratio, carcass composition and blood lipids.
AU Newport, M. J.; Storry, J. E.; Tuckley, B.
CS Nat. Inst. for Res. in Dairying, Shinfield, Reading RG2 9AT, UK
SO British Journal of Nutrition, (1979), 41 (1) 85-93, 28 ref.
DT Journal
LA English

L1 ANSWER 93 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1978(10):S1571 FSTA
TI Effect of various triglycerides on blood and tissue cholesterol of calves.
AU Stewart, J. W.; Wiggers, K. D.; Jacobson, N. L.; Berger, P. J.
CS Nutr. Physiol. Group, Dep. of Anim. Sci., Iowa State Univ., Ames, Iowa 50011, USA
SO Journal of Nutrition, (1978), 108 (4) 561-566, 23 ref.
DT Journal
LA English

L1 ANSWER 94 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1977(07):N0362 FSTA
TI Determination of sterols in fats and oils.

AU Tamura, T.; Maruyama, T.; Isoda, Y.; Sato, S.; Suzuki, K.; Murui, T.; Yoneyama, S.; Watanabe, M.
CS Coll. of Sic. & Tech., Nihon Univ., 1-8, Kanda-Surugadai, Chiyoda-ku, Tokyo, Japan
SO Journal of Japan Oil Chemists' Society [Yukagaku], (1976), 25 (12) 853-859, 16 ref.
DT Journal
LA English

L1 ANSWER 95 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1975(04):M0508 FSTA
TI **MCT** cookies, cakes and quick bread recipes for altitudes from sea level to 10 000 feet above sea level.
AU Bowman, F.; Dilsaver, W.
CS Dept. of Food Sci. and Nutr., Colorado St. Univ., Fort Collins, Colorado, USA
SO Bulletin, Experiment Station, Colorado State University, (1972), 555 S, 29pp.
DT Journal
LA English

L1 ANSWER 96 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1973(07):N0382 FSTA
TI [Gas chromatographic analysis of triglycerides.] Gaschromatographische Analyse von Triglyceriden.
AU Eckert, W. R.
CS ((Unilever Forschungsgesellschaft mbH, 2 Hamburg 50, Federal Republic of Germany
SO Fette, Seifen, Anstrichmittel, (1973), 75 (3) 150-152, 1 ref.
DT Journal
LA German
SL English; French; Russian

L1 ANSWER 97 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1973(07):M0859 FSTA
TI Muffins and pastry made with **medium-chain triglyceride** oil.
AU Howard, B. D.
CS Dept. of Home Economics, Univ. of Vermont, Burlington, USA
SO Journal of the American Dietetic Association, (1973), 62 (1) 51-52, 12 ref.
DT Journal
LA English

L1 ANSWER 98 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1972(09):N0430 FSTA
TI [Medium-chain triglycerides as fat basis for margarine.] Mittelkettige Triglyceride als Fettbasis fuer Margarine.
AU Wieske, T.; Menz, H.-U.
CS Unilever Res. Lab., 2 Hamburg 50, Behringstrasse 154, German Federal Republic
SO Fette, Seifen, Anstrichmittel, (1972), 74 (3) 133-136, 13 ref.
DT Journal
LA German
SL English; French; Russian

L1 ANSWER 99 OF 99 FSTA COPYRIGHT 2005 IFIS on STN
AN 1972(05):M0586 FSTA
TI Special dietary breads.
AU Lorenz, K.; Bowman, F.; Maga, J.
CS Dept. of Food Sci. & Nutr., St. Univ., Fort Collins, Colorado, USA
SO Bakers' Digest, (1971), 45 (5) 34-35 & 38-40, 28 ref.
DT Journal
LA English

```
=> file foodsci
'FOODSCI' IS NOT A VALID FILE NAME
SESSION CONTINUES IN FILE 'FSTA'
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available.  If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.

=> file foods
'FOODS' IS NOT A VALID FILE NAME
SESSION CONTINUES IN FILE 'FSTA'
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available.  If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.

=> file caplus
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                             200.07     200.28

FILE 'CAPLUS' ENTERED AT 12:44:06 ON 08 FEB 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
American Chemical Society and is provided to assist you in searching
databases on STN.  Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 8 Feb 2005  VOL 142 ISS 7
FILE LAST UPDATED: 7 Feb 2005  (20050207/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.


=> s obesity and (mct or medium(w)chain(w)triglyceride)
         29880 OBESITY
          2667 MCT
        679944 MEDIUM
        613885 CHAIN
         35272 TRIGLYCERIDE
           701 MEDIUM(W)CHAIN(W)TRIGLYCERIDE
L4          37 OBESITY AND (MCT OR MEDIUM(W)CHAIN(W)TRIGLYCERIDE)

=> d l4 cbib,ab 1-37

L4   ANSWER 1 OF 37  CAPLUS  COPYRIGHT 2005 ACS on STN
2004:635902   Document No. 141:137430  Lactate transport in skeletal muscle:
     Training-induced adaptation and significance in physical exercise.  Juel,
     C. (Copenhagen Muscle Research Centre, August Krogh Institut, Universitaet
     Kopenhagen, Kopenhagen, Den.).  Deutsche Zeitschrift fuer Sportmedizin,
     55(6), 157-160 (German) 2004.  CODEN: DZSPD8.  ISSN: 0344-5925.
     Publisher: WWF Verlagsgesellschaft mbH.
AB   A review.  Skeletal muscle possesses a membrane transport system for
     lactate transport.  This transporter is important in directing the
```

energy-rich compound lactate between cells and tissues. The lactate transporter mediates a 1:1 coupled transport of lactate and H+. Because of this obligatory coupling between lactate and H+, lactate/H+ co-transport is of great importance for pH regulation in skeletal muscle. The lactate coupled H+ flux is especially important during intense exercise, which is associated with a large lactic acid production The lactate/H+ co-transporter protein exists in two isoforms named MCT1 and MCT4, which have different fiber-type distributions. The d. of MCT1 and MCT4 proteins in skeletal muscle membranes can be regulated. Both endurance and high-intensity training have been demonstrated to increase the d. of MCT1 and MCT4 proteins in muscle membranes. Therefore, one beneficial effect of training is an increased capacity for lactate and H+ transport across muscle membranes. Studies suggest that lactate/H+ co-transport is impaired in patients with type 2 diabetes and **obesity.**

L4 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
2004:220196 Document No. 140:252730 Antiobesity agents and foods and drinks comprising the same. Shinohara, Hisami; Noguchi, Osamu; Asami, Fumie; Shimada, Hatsumi; Inui, Toshiyuki (The Nisshin Oillio, Ltd., Japan). PCT Int. Appl. WO 2004022049 A1 20040318, 103 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (Japanese). CODEN: PIXXD2. APPLICATION: WO 2003-JP11291 20030904. PRIORITY: JP 2002-260689 20020905.
AB The antiobesity agents (I) comprise medium-chain triglycerides as main active ingredients. I are useful for prevent and control of **obesity**-related diseases such as diabetes, hypertension, hyperlipemia, fatty liver, gout, etc.

L4 ANSWER 3 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
2004:117751 Document No. 140:162820 Blood triglyceride level control agents containing medium-chain triglycerides, their use, and foods containing them. Kozue, Hideaki; Kasai, Michio; Nosaka, Naohisa; Okazaki, Mitsuko; Igarashi, Osamu; Kondo, Kazuo (Nisshin Oil Mills Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2004043337 A2 20040212, 16 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2002-200844 20020710.
AB The agents contain medium-chain triglycerides, wherein ≥90% of the constituent fatty acids comprises C8 and C10 saturated fatty acids, weight ratio of C8 saturated fatty acids and C10 saturated fatty acids is 60:40-85:15, and rate of C8 saturated fatty acids to total fatty acids at the 2-position of triglycerides is 60-85%. The agents are used for controlling blood triglyceride concentration of persons with BMI ≥23. Also claimed are foods containing the agents. Mixing 999 g ODO (a com. medium-chain triglycerides) and 1 g tocopherol gave a blood triglyceride level control agent. A beverage containing the agent, dextrin, casein, and sucrose significantly suppressed postprandial increase in blood triglycerides in volunteers with MI ≥23. Blood triglyceride levels of volunteers with BMI <23 was not affected by the beverage.

L4 ANSWER 4 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
2003:929378 Document No. 139:358789 Use of monocarboxylate transporter proteins for thyroid hormone transport. Friesema, Edith Catharina Hendrika; Krenning, Eric Paul; Visser, Theofilus Johannes (Stichting Tot Bevordering van de Wetenschap der Endocrinologie, Neth.). Eur. Pat. Appl. EP 1364962 A1 20031126, 19 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR. (English). CODEN: EPXXDW. APPLICATION: EP 2002-77061 20020524.

AB The invention provides a use of a monocarboxylate transporter protein or a functional part, derivative and/or analog thereof for altering transport of a thyroid hormone or a functional part, derivative and/or analog thereof across a membrane. Said monocarboxylate transporter protein preferably comprises **MCT**-8. An isolated mol. capable of specifically binding at least part of an **MCT** protein, or at least part of a ligand of an **MCT** protein, is also herewith provided. Regulation of the bioavailability of thyroid hormone in a tissue enables interfering with (metabolic) diseases. Hence, the invention also provides pharmaceutical compns. comprising a compound capable of binding said **MCT** protein, or capable of influencing the binding or transporting of a ligand of said **MCT** protein. Methods for treatment of a disease such as a disorder of thyroid metabolism, non-thyroidal illness, **obesity** or cardiovascular illness are also provided, as well as bioassays for identifying or detecting a candidate drug capable of binding to or influencing at least part of said **MCT** protein.

L4 ANSWER 5 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

2003:865611 Document No. 140:110561 Effects of ingestion of margarine containing medium-chain triglycerides for 4 weeks on blood parameters and postprandial thermogenesis. Nosaka, Naohisa; Suzuki, Yoshie; Maki, Hideaki; Haruna, Hirofumi; Ohara, Atsushi; Kasai, Michio; Tsuji, Hiroaki; Aoyama, Toshiaki; Okazaki, Mitsuko; Kondo, Kazuo (Division of Healthcare Science, Research Laboratory, The Nisshin Oillio, Ltd., Kanagawa, 239-0832, Japan). Journal of Oleo Science, 52(11), 571-581 (English) 2003. CODEN: JOSOAP. ISSN: 1345-8957. Publisher: Japan Oil Chemists' Society.

AB The effects of prolonged ingestion of margarine containing medium-chain triglycerides (**MCT**-M) or long-chain triglycerides (LCT-M) on blood serum lipids, apolipoprotein and vitamin A levels and on postprandial thermogenesis were compared in 26 healthy subjects with body mass index 22.6±3.3 kg/m2. They ingested 1950-2400 kcal energy, 59-69 g total fat, and 42 g test margarine (15 g **MCT** or LCT) daily for 4 wk. The daily intake of medium-chain fatty acids was greater with the **MCT**-M vs. LCT-M diet (14.2±0.4 vs. 0.2 ± 0.0 g) during the 4-wk period. There were no significant differences in blood concns. of lipids, lipoproteins, apolipoproteins, retinol, glucose, insulin, ketone bodies, hemocytes and electrolytes or in measures of liver and renal function between the 2 diet groups. After prolonged ingestion of **MCT**-M, consumption of an **MCT**-M meal led to increased postprandial O2 consumption compared with an LCT-M meal (after 30 min: **MCT**-M 45±7 vs. LCT-M 30±7 mL/min). Thus, the effects of ingestion **MCT**-M and LCT-M for 4 wk on blood serum lipids, lipoproteins, apolipoproteins, retinol, ketones, plasma glucose, and liver and renal functions were similar. The prolonged ingestion of 15 g **MCT** in healthy humans did not attenuate the postprandial thermogenesis caused by meals containing 5 g **MCT**. **MCT**-M may be an efficient foodstuff for preventing **obesity** in healthy humans.

L4 ANSWER 6 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

2003:427972 Document No. 139:245197 Consumption of an oil composed of medium chain triacylglycerols, phytosterols, and n-3 fatty acids improves cardiovascular risk profile in overweight women. Bourque, Christine; St-Onge, Marie-Pierre; Papamandjaris, Andrea A.; Cohn, Jeffrey S.; Jones, Peter J. H. (School of Dietetics and Human Nutrition, McGill University, Ste-Anne-de-Bellevue, QC, Can.). Metabolism, Clinical and Experimental, 52(6), 771-777 (English) 2003. CODEN: METAAJ. ISSN: 0026-0495. Publisher: W. B. Saunders Co..

AB Medium-chain triacylglycerols (**MCT**) may be efficacious in body weight management because they have greater thermogenic qualities relative to long-chain triacylglycerols, but **MCT** may also increase circulating lipid concns. and possibly increase risk of cardiovascular disease (CVD). The effects of diet supplemented with functional oil (FctO) composed of energy expenditure-enhancing **MCT** (50% fat),

cholesterol-lowering phytosterols (22 mg/kg body weight), and triacylglycerol-suppressing n-3 fatty acids (5% fat) and of beef tallow-based control diet (BT) on blood plasma lipids and aminothiol concns. were studied in 17 overweight women. They consumed each oil as part of an energy balanced diet for 27 days, with 4 or 8 wk of washout in between. Mean blood plasma total cholesterol concentration was lower by 9.1% with FctO (4.37±0.20 mmol/L) vs. BT (4.80±0.20 mmol/L). Mean plasma low-d. lipoprotein (LDL) cholesterol level was also lower following FctO (2.39±0.15 mmol/L) vs. BT (2.86±0.16 mmol/L), representing 16.0% difference between the 2 diets. High-d. lipoprotein (HDL) cholesterol and circulating triacylglycerol concns. were not affected by the dietary treatments. The HDL/LDL and HDL/total cholesterol ratios were higher by 22.0 and 11.0%, resp., with FctO vs. BT diets. Plasma total homocysteine levels remained unchanged with FctO, but decreased with BT, hence higher end points were observed with FctO (6.95±0.33 μmol/L) vs. BT (6.27±0.28 μmol/L). Plasma glutathione levels were increased by 0.44 μmol/L with FctO. Thus, despite equivocal effects on homocysteine levels, the consumption of functional oil composed of **MCT**, phytosterols, and n-3 fatty acids for 27 days improved the overall cardiovascular risk profile of overweight women.

L4 ANSWER 7 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

2003:246372 Document No. 138:400996 Medium-chain triglycerides increase energy expenditure and decrease adiposity in overweight men. St-Onge, Marie-Pierre; Ross, Robert; Parsons, William D.; Jones, Peter J. H. (School of Dietetics and Human Nutrition, McGill University, Ste-Anne-de-Bellevue, QC, Can.). Obesity Research, 11(3), 395-402 (English) 2003. CODEN: OBREFR. ISSN: 1071-7323. Publisher: North American Association for the Study of Obesi ty.

AB The effects of diets rich in medium-chain triglycerides (**MCT**, functional oil) or long-chain triglycerides (LCT, olive oil) on body composition, energy expenditure, substrate oxidation, subjective appetite, and ad libitum energy intake were studied in 24 healthy overweight men (body mass index 25-31 kg/m2). They consumed diets rich in **MCT** or LCT for 4 wk each. At baseline and after 4 wk of each dietary intervention, energy expenditure was measured by indirect calorimetry and body composition by magnetic resonance imaging. Upper body adipose tissue (AT) decreased to a greater extent with functional oil (FctO) compared with olive oil (OL) consumption (-0.67 ± 0.26 kg and -0.02 ± 0.19 kg, resp.). There was a trend toward greater loss of whole-body s.c. AT volume with FctO compared with OL consumption. Average energy expenditure was 0.04 ± 0.02 kcal/min greater on day 2 and 0.03 ± 0.02 kcal/min on day 28 with FctO compared with OL consumption. The average fat oxidation was greater with FctO vs. OL intake on day 2, but not on day 28. Thus, consumption of diet rich in **MCT** results in greater loss of AT compared with LCT, perhaps due to increased energy expenditure and fat oxidation observed with **MCT** intake. **MCT** may help in the prevention of **obesity** or stimulate body weight loss.

L4 ANSWER 8 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

2003:201839 Document No. 138:303128 Medium-chain triglycerides (**MCT**): Suitable for weight control?. Feldheim, Walter (Institut fuer Humanernaehrung und Lebensmittelkunde, Christian-Albrechts-Universitaet, Kiel, 24105, Germany). Ernaehrungs-Umschau, 50(1), 4-8 (German) 2003. CODEN: ERUMAT. ISSN: 0174-0008. Publisher: Umschau Zeitschriftenverlag Breidenstein GmbH.

AB A review. Medium-chain triglycerides (**MCT**) should predominantly consist of caprylic acid (C8:0) and capric acid (C10:0) and only contain small amts. of caproic (C6:0) and lauric acid (C12:0). The average caloric value of **MCT** is 8.25 kcal/g. **MCT** are quicker hydrolyzed compared to triglycerides consisting of long-chain fatty acids (LCT). Medium-chain fatty acids reach the liver, where most of the **MCT** is oxidized, via the portal vein. Acetyl-CoA produced by β-oxidation is further oxidized to CO2 and may be used for ketone body

formation and de-novo synthesis of fatty acids. In the majority of studies, the β-hydroxybutyrate plasma level increased after intake of **MCT**. Some of the medium-chain fatty acids are subject to omega-oxidation from which dicarbonic acids result. Weight loss in persons on reduction diets is increased by exchange of LCT containing food by food containing **MCT**. This is due to the lower caloric value of **MCT** and higher energy losses, compared to LCT, by nutritional thermogenesis and/or a higher basal metabolism If LCT are replaced by **MCT**, about 2 kcal/g fat are saved, provided the **MCT** are triglycerides with C8 and C10 fatty acids. In obese persons, oxidation of dietary long-chain, but not of medium-chain fatty acids, could be reduced. Some studies have shown **MCT** to enhance the feeling of satiation. These advantages of **MCT** help in reduction diets and increase compliance.

L4 ANSWER 9 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

2003:57839 Document No. 138:89054 milk fat-derived **medium-chain triglyceride**-high nutritional products useful for preventing or treating **obesity**. Corkey, Barbara E.; Guo, Wen; Han, Jianrong (Trustees of Boston University, USA). PCT Int. Appl. WO 2003005836 A2 20030123, 69 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US21908 20020710. PRIORITY: US 2001-PV304476 20010710; US 2001-PV327635 20011007.

AB The present invention provides dietary products for infant, child and adult nutrition which possess adequate levels and ratios of medium chain fatty acids and ω-polyunsatd. fatty acids. Consumption of these dietary products can contribute to the prevention of **obesity** in developing individuals and can contribute to a reduction in body fat mass in individuals who are trying to loose weight or reduce body fat mass (e.g., obese individuals). A first preferred product is a dairy supplement or formulated dairy product for consumption by infants or children to prevent development of **obesity**. A second preferred product is a dietary supplement for persons combating unwanted weight gain or **obesity**. Also featured are methods of formulating these dietary products.

L4 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

2003:39611 Document No. 138:320369 Medium- versus long-chain triglycerides for 27 days increases fat oxidation and energy expenditure without resulting in changes in body composition in overweight women. St-Onge, M-P.; Bourque, C.; Jones, P. J. H.; Ross, R.; Parsons, W. E. (School of Dietetics and Human Nutrition, McGill University, Ste-Anne-de-Bellevue, QC, H9X 3V9, Can.). International Journal of Obesity, 27(1), 95-102 (English) 2003. CODEN: IJOBDP. ISSN: 0307-0565. Publisher: Nature Publishing Group.

AB OBJECTIVE: To determine the effects of long-term consumption of medium chain (**MCT**) vs. long chain triglycerides (LCT) on energy expenditure (EE), substrate oxidation and body composition HYPOTHESIS: **MCT** consumption will not result in greater EE, substrate oxidation, and body weight loss compared with LCT consumption. RESEARCH METHODS AND PROCEDURES: Seventeen healthy obese women participated in this randomized, crossover inpatient trial. Meals were prepared and consumed on site for two periods of 27 days. Diets containing 40% of energy as fat, with treatment fat comprising 75% of the total fat, were designed to supply each subject with their individual weight-maintaining energy needs. The **MCT** diet contained 67% of treatment fat as **MCT** oil (49% octanoate, 50% decanoate) whereas the LCT diet contained exclusively beef tallow as treatment fat. Body composition was assessed by magnetic resonance imaging (MRI) on day 1 and 28 of each phase while energy expenditure was measured

on day 2 and 27. RESULTS: Changes in total and s.c. adipose tissue vols. following consumption of **MCT** and LCT were not different (-0.61±0.38 l vs -0.54±0.48 l and -0.58±0.35 l vs -0.48±0.40 l, resp.). Average EE and fat oxidation were greater (P<0.05) during **MCT** than LCT consumption (0.95±0.019 vs 0.90±0.024 kcal/min, resp., for EE and 0.080±0.0026 vs 0.075±0.0022 g/min, resp. for fat oxidation). DISCUSSION: These results show that long-term consumption of **MCT** enhances EE and fat oxidation in obese women, when compared to LCT consumption. The difference in body composition change between **MCT** and LCT consumption, although not statistically different, was consistent with differences predicted by the shifts in EE. It can be concluded that substitution of **MCT** for LCT in a targeted energy balance diet may prevent long-term weight gain via increased EE.

L4 ANSWER 11 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
2003:22702 Document No. 138:84568 Trp1, **MCT**, or Ftz-F1 homologous proteins involved in the regulation of energy homeostasis, and their diagnostic and therapeutic uses thereof. Eulenberg, Karsten; Broenner, Guenter; Haeder, Thomas; Ciossek, Thomas; Steuernagel, Arnd (Develogen Aktiengesellschaft fuer Entwicklungsbiologische Forschung, Germany). PCT Int. Appl. WO 2003002137 A2 20030109, 86 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-EP7079 20020626. PRIORITY: EP 2001-115482 20010627; EP 2001-115965 20010629; EP 2001-117033 20010712.

AB The present invention discloses Trp 1, **MCT**, or Ftz-F 1 homologous proteins regulating the energy homeostasis and the metabolism of triglycerides, and polynucleotides, which identify and encode the proteins disclosed in this invention. The invention also relates to the use of these sequences in the diagnosis, study, prevention, and treatment of diseases and disorders related to body-weight regulation, for example, but not limited to, metabolic diseases such as **obesity**, as well as related disorders, such as adipositas, eating disorders, wasting syndromes (cachexia), pancreatic dysfunctions (such as diabetes mellitus), hypertension, arteriosclerosis, coronary artery disease (CAD), hypercholesterolemia, dyslipidemia, osteoarthritis, gallstones, cancer, e.g. cancers of the reproductive organs, sleep apnea, and others.

L4 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
2003:4749 Document No. 138:33342 Use of medium-chain triglycerides for prevention and treatment of **obesity.** Kuzela, Lubomir; Feldheim, Walter (Heirler, Horst, Germany). Eur. Pat. Appl. EP 1269859 A2 20030102, 10 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR. (German). CODEN: EPXXDW. APPLICATION: EP 2002-13931 20020624. PRIORITY: DE 2001-10130491 20010625.

AB The invention discloses the use of medium-chain triglycerides, or of compns. containing them for the prevention and treatment of **obesity.** The compns. preferably also contain e.g. α-linoleic and/or α-linolenic acids, as well as another additives and/or ingredients. Preparation of a margarine containing of medium-chain triglycerides is described.

L4 ANSWER 13 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
2002:210928 Document No. 136:368955 Physiological effects of medium-chain triglycerides: potential agents in the prevention of **obesity.** St-Onge, Marie-Pierre; Jones, Peter J. H. (School of Dietetics and Human Nutrition, McGill University, Ste-Anne-de-Bellevue, QC, H9X 3V9, Can.). Journal of Nutrition, 132(3), 329-332 (English) 2002. CODEN: JONUAI.

ISSN: 0022-3166. Publisher: American Society for Nutritional Sciences.
AB A review on the effects of medium-chain triglycerides (**MCT**) on energy expenditure (EE) and satiety and their potential efficacy as agents in the treatment of human **obesity.**

L4 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
2001:720646 Document No. 136:134120 Value of VLCD supplementation with medium chain triglycerides. Krotkiewski, M. (Department of Medical Rehabilitation, Sahlgrenska University Hospital, Goteborg, Swed.). International Journal of Obesity, 25(9), 1393-1400 (English) 2001. CODEN: IJOBDP. ISSN: 0307-0565. Publisher: Nature Publishing Group.
AB BACKGROUND: Medium chain triglycerides (**MCT**) are energetically less dense, highly ketogenic, and more easily oxidized than long chain triglycerides (LCT). **MCT** also differ from LCT in their digestive and metabolic pathways. OBJECTIVE: To test the effects of **MCT** supplementation during a very low calorie diet (VLCD). SUBJECTS AND METHODS: Three groups of tightly matched obese women with body mass index (BMI) > 30 kg/m2 received an isoenergetic (578.5 kcal) VLCD (Adinax, Novo Vital, Sweden) enriched with **MCT** or LCT (8.0 and 9.9g/100g Adinax resp.) or a low-fat (3g/100g) and high-carbohydrate regimen. The diets were administered over 4 wk. Body composition was measured with DEXA and appetite/satiety-according to Blundell. Beta hydroxybutyric acid concentration in plasma and nitrogen excretion in urine was measured during consecutive days of VLCD. The study was performed in a randomized double-blind manner. RESULTS: The **MCT** group showed a significantly greater decrease in body weight during the first 2 wk. The contribution of body fat to the total weight loss was higher while the contribution of fat-free mass (FFM) was lower. The **MCT** group had a higher concentration of ketone bodies in plasma and a lower nitrogen excretion in urine. Hunger feelings were less intense while satiety was higher. These differences were observed during the first 2 wk of treatment and gradually declined during the third and fourth weeks. CONCLUSIONS: Replacement of LCT by **MCT** in the VLCD increased the rate of decrease of body fat and body weight and has a sparing effect on FFM. The intensity of hunger feelings was lower and paralleled the higher increase of ketone bodies. These effects gradually declined, indicating subsequent metabolic adaptation. Further studies are required to confirm the proteinsparing and appetite-suppressing effects of **MCT** supplementation during the first 2 wk of VLCD treatment.

L4 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
2001:513666 Document No. 135:256592 The effects of 2-week ingestion of (-)-hydroxycitrate and (-)-hydroxycitrate combined with medium-chain triglycerides on satiety, fat oxidation, energy expenditure and body weight. Kovacs, E. M. R.; Westerterp-Plantenga, M. S.; Saris, W. H. M. (Department of Human Biology, Maastricht University, Maastricht, 6200 MD, Neth.). International Journal of Obesity, 25(7), 1087-1094 (English) 2001. CODEN: IJOBDP. ISSN: 0307-0565. Publisher: Nature Publishing Group.
AB The effects of 2-wk dietary supplementation with (-)-hydroxycitrate (HCA) and HCA plus medium-chain triglycerides (**MCT**) on satiety, fat oxidation, energy expenditure (EE), and body weight (BW) loss were examined in 11 obese men (age 47±16 yr; body mass index 27.4±8.2 kg/m2) in three 2-wk intervention periods separated by 4-wk washout periods. The men consumed 3 self-selected meals and 4 iso-energetic (420 kJ) snacks daily with no supplement (PLA), 500 mg HCA, or 500 mg HCA plys 3 g **MCT.** Each intervention period ended with a 36-h stay in the respiration chamber. There was BW loss during the 2-wk intervention (PLA -1.0±0.4 kg; HCA -1.5±0.5 kg; HCA + **MCT** -1.3±0.2 kg), but the decreases were not different among the 3 treatments. The 24-h EE (PLA 11.8±0.2 MJ; HCA 11.7±0.1 MJ; HCA + **MCT** 11.5±0.1 MJ), 24-h RQ (0.85±0.00 in all 3 treatments), and the area under the curve of appetite-related parameters were not different among the 3 treatments.

Thus, 2-wk supplementation with HCA and HCA plus **MCT** did not increase satiety, fat oxidation, 24-h EE, or BW loss compared to PLA in men losing BW.

L4 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
2001:307161 Document No. 135:303210 Effects of medium-chain fatty acids on body composition and protein metabolism in overweight rats. Simon, E.; Fernandez-Quintela, A.; Del Puy Portillo, M.; Del Barrio, A. S. (Department of Nutrition & Food Science, University of the Basque Country, Vitoria, 01006, Spain). Journal of Physiology and Biochemistry, 56(4), 337-346 (English) 2000. CODEN: JPBIF2. ISSN: 1138-7548. Publisher: Servicio de Publicaciones de la Universidad de Navarra.
AB In order to obtain information about the effects of dietary fatty acid composition on body fat and protein metabolism, overweight female rats were fed isoenergetic diets, using either medium-chain (**MCT**) or long-chain (LCT) triglycerides as a lipid source. After 23 days, the **MCT** group had mildly decreased body weight but greatly reduced adipose tissue depots. All fat depots were significantly diminished. **MCT**-fed rats showed a decrease in some hormones involved in energy balance, such as leptin and triiodothyronine. Feeding **MCT** resulted in improvements in nitrogen balance. Muscle protein content was similar in both treatments despite an increase in protein degradation in the **MCT** group. The present data clearly show that a diet with **MCT** as lipid fuel depresses weight gain and fat stores, relative to a standard LCT diet.

L4 ANSWER 17 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
1998:316574 Document No. 129:40546 Influence of human **obesity** on the metabolic fate of dietary long- and medium-chain triacylglycerols. Binnert, Christophe; Pachiaudi, Christiane; Beylot, Michel; Hans, Didier; Vandermander, Jacques; Chantre, Philippe; Riou, Jean-Paul; Laville, Martine (Groupement d'Interet Public Centre de Recherche en Nutrition Humaine de Lyon, Hopital E Herriot, Lyon, Fr.). American Journal of Clinical Nutrition, 67(4), 595-601 (English) 1998. CODEN: AJCNAC. ISSN: 0002-9165. Publisher: American Society for Clinical Nutrition.
AB The metabolic fate of an oral long-chain-triacylglycerol (LCT) load and of a mixed oral LCT and medium-chain-triacylglycerol (**MCT**) load was followed for 6 h in eight control and eight obese subjects with normal postabsorptive triacylglycerol concns. Labeled triacylglycerol and indirect calorimetry were used. Results showed that LCTs were less oxidized in obese than in control subjects (3.2 ± 0.5 compared with 6.0 ± 0.4 g, $P < 0.01$). Moreover, the amount of LCT oxidized was neg. correlated with fat mass ($r = -0.77$, $P < 0.01$). Appearance in plasma of dietary triacylglycerol-derived long-chain fatty acids was blunted in obese subjects and it was neg. related to fat mass ($r = -0.84$, $P < 0.01$) and pos. to LCT oxidation ($r = 0.70$, $P < 0.01$). On the contrary, **MCT** oxidation was not altered in obese subjects compared with control subjects. Furthermore, the proportion of MCTs oxidized was higher in both groups compared with LCTs (x ± SEM: 57.5 ± 2.6% compared with 15.2 ± 1.6%, $P < 0.01$, $n = 16$). Our conclusion is that **obesity** is associated with a defect in the oxidation of dietary LCTs probably related to an excessive uptake by the adipose tissue of meal-derived long-chain fatty acids. MCTs, the oxidation of which is not altered in **obesity**, could therefore be of interest in the dietary treatment of **obesity**.

L4 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
1996:560553 Document No. 125:204558 Product for enteric administration of unsaturated fatty acids and glycerides for treatment of glucose intolerance and related metabolic disorders. Desaga, Johann Friedrich (Germany). Ger. Offen. DE 19503993 A1 19960814, 4 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1995-19503993 19950208.
AB A medicinal product containing a microencapsulated n-3 fatty acid and a **medium-chain triglyceride**, or a stable

dispersion of these lipids (e.g. in a plasticized starch matrix), is provided for treatment or prevention of glucose intolerance, insulin resistance, hyperlipemia associated with **obesity**, metabolic syndrome, diabetes mellitus, gastrointestinal disorders, and skin diseases such as psoriasis (no data). The fatty acid may be masked by inclusion in an amylose helix, and the oil by adsorption onto a carrier; or the lipids may be enclosed in phospholipid liposomes or spray-coated. Fish oil is a preferred source of n-3 fatty acids.

L4 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
1996:287504 Document No. 124:315570 The usefulness of dietary medium-chain triglycerides in body weight control: fact or fancy?. Bach, Andre C.; Ingenbleek, Yves; Frey, Anny (CEPE, CNRS, Strasbourg, Fr.). Journal of Lipid Research, 37(4), 708-726 (English) 1996. CODEN: JLPRAW. ISSN: 0022-2275. Publisher: Lipid Research, Inc..
AB A review with 222 refs. Compared to long-chain triglycerides (LCT), medium-chain triglycerides (**MCT**) display some specific physicochem. and biol. characteristics. Thus, **MCT** are currently used in clin. nutrition as energy-yielding substrates, and have been advocated for three decades as a useful mean for body weight reduction This review encompasses most aspects of **MCT** metabolism, arguing this slimming hypothesis pro and con. Findings in support of the opinion (lower energy d., control of satiety, rapid intrahepatic delivery and oxidation rates, poor adipose tissue incorporation) may be invalidated by counteracting data (stimulation of insulin secretion and of anabolic-related processes, increased de novo fatty acid synthesis, induced hypertriglyceridemia). The balance between these two opposing influences depends on the composition (energy intake, nature of ingredients, **MCT**/LCT ratio, octanoate/decanoate ratio) and duration of the regimen. Due to the high energy level (around 50%) of **MCT** necessary to achieve body weight loss, long-term compliance to such slimming regimens is unlikely in human nutrition.

L4 ANSWER 20 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
1995:394410 Document No. 122:159413 Differential effects of high-fat diets varying in fatty acid composition on the efficiency of lean and fat tissue deposition during weight recovery after low food intake. Dulloo, Abdul G.; Mensi, Noury; Seydoux, Josiane; Girardier, Lucien (Fac. Med., Univ. Geneva, Geneva, Switz.). Metabolism, Clinical and Experimental, 44(2), 273-9 (English) 1995. CODEN: METAAJ. ISSN: 0026-0495. Publisher: Saunders.
AB The energetics of body weight recovery after low food intake was examined in the rat during refeeding for 2 wk with isocaloric amts. of high-fat (HF) diets providing 50% of energy as either lard, coconut oil, olive oil, safflower oil, menhaden fish oil, or a mixture of all these fat types. The results indicate that for both body fat and protein, the efficiency of deposition was dependent on the dietary fat type. The most striking differences were found (1) between diets rich in n-3 and n-6 polyunsatd. fatty acids (PUFA), with the diet high in fish oil resulting in a greater body fat deposition and lower protein gain than the diet high in safflower oil and (2) between diets rich in long-chain (LCT) and medium-chain triglycerides (**MCT**), with the diet high in lard resulting in a greater gain in both body fat and protein than the diet high in coconut oil. Furthermore, the diet high in olive oil (a monounsatd. fat) and the mixed-fat diet (containing all fat types) were found to be similar to the fish oil diet in that the efficiency of fat deposition was greater (and that of protein gain lower) than with the diet high in safflower oil. Neither the efficiency of fat gain nor that of protein gain were found to correlate with fasting plasma insulin, the insulin to glucose ratio, or plasma lipids. The present studies, conducted specifically under conditions of isocaloric refeeding after low food intake, demonstrate that the fatty acid composition of HF diets influences the recovery of both lean and fat tissue compartments - apparently by mechanisms unrelated to plasma insulin and lipid status. The relevance of these findings is discussed in the context of nutritional rehabilitation after undernutrition, as well as in

the context of dietary management of **obesity** relapse.

L4 ANSWER 21 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
1990:550094 Document No. 113:150094 Urinary organic acid profiles in fatty Zucker rats: indications for impaired oxidation of butyrate and hexanoate. McDevitt, Joseph; Wilson, Sylvia; Her, Guor Rong; Stobiecki, Maciej; Goldman, Peter (Dep. Nutr., Harvard Sch. Public Health, Boston, MA, 02115, USA). Metabolism, Clinical and Experimental, 39(10), 1012-20 (English) 1990. CODEN: METAAJ. ISSN: 0026-0495.
AB The urinary excretion of 45 organic acids, monitored by GC, was compared in fatty (fa/fa) and lean (Fa/) Zucker rats maintained on a chemical simplified diet. At the age of 6, 16, and 22 wk, fatty rats excreted more of the various organic acids than their lean counterparts. The greatest difference was in the excretion of ethylmalonate, even when the excretion data were normalized to body weight The next highest excretion difference was shown by adipate and an unknown compound, and the third highest by pyruvate. A second group of rats examined at 7 wk also excreted an excess of these 4 acids, as well as glucuronate and indole-3-acetate. The excessive excretion of ethylmalonate and adipate, which is characteristic of human genetic defects in short- and medium-chain fatty acid oxidation, suggested that the oxidation of butyrate and hexanoate might be impaired in the fatty rat. Thus, as a test of their capacity to oxidize medium- and short-chain fatty acids, two groups of fatty and lean rats were transferred to diets enriched with trioctanoylglyceride, a **medium-chain triglyceride** (**MCT**), or sodium butyrate, a short-chain fatty acid. Both lean and fatty rats on the **MCT** diet, but only the lean rats on the butyrate-enriched diet, increased their excretion of adipate. On both the **MCT** and butyrate diet, ethylmalonate excretion increased only in lean rats, almost reaching amts. found previously in fatty rats. The fatty rat may have an impairment of the β-oxidation of butyrate and hexanoate, a defect that might increase intracellular concns. of butyryl-CoA, the optimal primer for the synthesis of long-chain fatty acids.

L4 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
1987:49115 Document No. 106:49115 Influence of diet on the production of a "lipid-depleting" factor in obese parabiotic rats. Harris, Ruth B. S.; Martin, Roy J. (Dep. Foods Nutr., Univ. Georgia, Athens, GA, 30602, USA). Journal of Nutrition, 116(10), 2013-27 (English) 1986. CODEN: JONUAI. ISSN: 0022-3166.
AB When one member of a parabiosed pair of rats (parabiosis is the surgical union of 2 animals to produce a chronic blood exchange) is made obese, its partner experiences a specific loss of body fat. It was determined whether production of the lipid-depleting factor [106255-05-4] in obese rats was diet-specific. One member in each of 30 pairs was tube-fed 200% normal intake of high-carbohydrate (CHO), high-fat corn oil or high-fat **medium-chain triglyceride** diet. Their partners and both members of five control pairs ate CHO diet ad libitum. After 27 d of 200% feeding, in vitro hepatic, adipose and hypothalamic metabolism were measured. Composition of the diet used to induce **obesity** did not change the response of partners. All non-tube-fed partners had normal food intakes, body protein, hepatic fatty acid synthesis (FAS) and esterification (FAE), palmitate [57-10-3], glucose [50-99-7] and β-hydroxybutyrate [300-85-6] oxidation Adipose FAS and FAE were depressed, body fat was halved. Hypothalamic metabolism was not changed. A lipid-depleting agent originating in obese rats specifically inhibits adipose lipogenesis in their partners. Production of this factor does not appear to be influenced by dietary energy source.

L4 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
1986:405569 Document No. 105:5569 Thermogenic effect of dietary medium-chain triglycerides in man. Contaldo, Franco; Scalfi, Luca; Coltorti, Alberto; Mazzacano, Carmela; Reed, Louise Ann; Laviano, Alessandra; Mancini, Mario (2nd Med. Sch., Univ. Naples, Italy). International Congress Series, 681(Diabetes, Obes. Hyperlipidemias-3), 209-16 (English) 1985. CODEN:

EXMDA4. ISSN: 0531-5131.

AB To study the thermic effect of medium-chain triglycerides (**MCT**), postprandial thermogenesis in 6 lean and 6 obese subjects was evaluated after a 1300 kcal mixed meal (protein 17 carbohydrate 58, and fat 25%, 30 g being long-chain triglycerides (LCT), as corn oil, or **MCT**). The resting metabolic rate (RMR) was measured at the beginning of the test and for 6 h after the meal. As expected, RMR was significantly higher in the obese individuals. Postprandial thermogenesis after LCT or **MCT** meals did not differ between lean and obese subjects; however, the postprandial increase in heat production was significantly greater after **MCT** meals than after LCT meals in both groups. Thus, **MCT** in a moderate proportion, do markedly increase postprandial thermogenesis after a mixed meal when compared to LCT.

L4 ANSWER 24 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

1986:167347 Document No. 104:167347 Evaluation of the protein quality of diets containing medium- and long-chain triglyceride in healthy rats. Ling, Pei Ra; Hamawy, Karim J.; Moldawer, Lyle L.; Istfan, Nawfal; Bistrian, Bruce R.; Blackburn, George L. (Cancer Res. Inst., Harvard Med. Sch., Boston, MA, 02215, USA). Journal of Nutrition, 116(3), 343-9 (English) 1986. CODEN: JONUAI. ISSN: 0022-3166.

AB In this study, protein efficiency ratio and net protein utilization together with the kinetic ests. of protein turnover were used to compare the effect of different protein and fat sources in healthy rats. Male Sprague-Dawley CD rats were pair-fed different diets for 14 days. All diets were isonitrogenous and isocaloric, containing 10.4% protein, 10.9-11.4% fat, 31.9-32.8% carbohydrate, and 43.5-44.5% moisture (weight/weight). After 14 days of feeding, protein efficiency ratio, net protein utilization, weight gain, intake, fat and protein content in the whole-body and fractional synthetic rates in various tissues were determined Animals given diets containing medium-chain triglycerides (**MCT**) demonstrated decreased weight gain and fat content compared to the pair-fed controls receiving long-chain triglycerides (LCT). No difference was seen in protein content, net protein utilization, and fractional synthetic rates in the liver and whole body of these **MCT**-fed rats when compared to those given LCT. Protein efficiency ratios in both of the **MCT** groups fed **MCT** + casein and **MCT** + soy protein were lower than those in the groups given LCT + casein. Although this study did not include a group for LCT and soy protein, these results suggest that **MCT** reduces the fat deposition without affecting the whole-body protein content. This may have implications for the treatment of **obesity**. Secondly, the protein efficiency ratio may not be a useful indicator of dietary protein quality when the fat source is **MCT**.

L4 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

1984:590213 Document No. 101:190213 Metabolic effects of medium- or long-chain triglycerides and high-protein, carbohydrate-free diets in Zucker rats. Bach, Andre C.; Bois-Joyeux, Brigitte; Chanez, Marc; Delhomme, Brigitte; Schirardin, Henri; Peret, Jean (Lab. Pathol. Gen., Hop. Civ., Strasbourg, Fr.). Metabolism, Clinical and Experimental, 33(10), 951-8 (English) 1984. CODEN: METAAJ. ISSN: 0026-0495.

AB The effects of protein levels and types of fat in the diet on the metabolism of lean and obese Zucker rats were studied. For 40 days, the rats were fed ad libitum 1 of 4 diets: 2 usual-protein diets (19% protein by weight) with 19.4% triacylglycerols, either long-chain (UP-LCT diet) or medium-chain (UP-**MCT** diet); and 2 high-protein (64% protein), carbohydrate-free diets, again with 19.4% triacylglycerols (HP-LCT and HP-**MCT** diets, resp.). The energy intakes of the obese rats decreased about equally on the HP-LCT, UP-**MCT**, and HP-**MCT** diets. The daily weight gain, which was high in the UP-LCT rats, was lower when carbohydrates were replaced by proteins, or when LCTs were replaced by MCTs; furthermore, when these 2 changes were made together, their beneficial effects on body weight were additive. The lipid gain, too, was

high with the UP-LCT diet and lower both with the high-protein diets and with the **MCT** diets; again, combining the 2 amplified the 2 individual effects, so much that the final lipid concentration in the body was lowered, whereas the concentration of water increased. Hepatic acetyl CoA carboxylase [9023-93-2] activity was low when the diet supplied plenty of LCTs, but replacing carbohydrates with proteins in such a diet produced an addnl. decrease in this enzymic activity. When either a normal protein or a high-protein diet supplied MCTs in place of LCTs, acetyl CoA carboxylase activity was high and similar to that found with a high-carbohydrate diet. In the lean rats, the high-protein diet overall had a greater effect on the parameters studied than did the **MCT**-based diet. The HP-**MCT** diet had no addnl. effect, except that it permitted the animals to gain a little weight, which is not the case with a high-protein, carbohydrate-free, low-fat diet.

L4 ANSWER 26 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

1983:538632 Document No. 99:138632 Effects of medium-chain and long-chain triacylglycerol diets on genetically obese Zucker fa/fa rats. Composition of fatty acids and triacylglycerols in liver and adipose tissue. Kinkela, T.; Chanussot, F.; Bach, A.; Max, J. P.; Schirardin, H.; Debry, G. (Dep. Nutr. Mal. Metab., Univ. Nancy I, Nancy, F-5400, Fr.). Annals of Nutrition & Metabolism, 27(5), 404-14 (French) 1983. CODEN: ANUMDS. ISSN: 0250-6807.

AB The effects of a hyperlipidic diet containing medium-chain triacylglycerols (**MCT**) or long-chain triacylglycerols (LCT) and a control diet on the lipid composition of liver and adipose tissue in the Zucker fa/fa and Fa/- rat are compared. The wts. of liver and adipose tissues of the rats fed the **MCT** diet are little different from those of the 2 other groups, but they are always higher in obese rats than in lean rats. After feeding the **MCT** diet, the amts. of the constituent octanoic [124-07-2] and decanoic [334-48-5] acids in liver and adipose tissues were higher in the fa/fa rat than in the Fa/- rat. The rate of lipogenesis in liver and adipose tissues of the obese rat fed the **MCT** diet remained high.

L4 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

1983:487105 Document No. 99:87105 Effects of medium- and long-chain triacylglycerols on adipose tissue metabolism in the obese Zucker rat. Max, J. P.; Bach, A.; Pallier, E.; Schirardin, H.; Debry, G. (Dep. Nutr. Mal. Metab., Univ. Nancy I, Nancy, 54000, Fr.). International Journal of Obesity, 7(2), 161-5 (English) 1983. CODEN: IJOBDP. ISSN: 0307-0565.

AB The influence of a diet including 18% by weight of long-chain (LCT) or medium-chain (**MCT**) triacylglycerols on adipose tissue development, and on in vitro adipose tissue triacylglycerol (TG) synthesis from glucose [50-99-7] and palmitic acid [57-10-3], was studied using genetically obese, fa/fa, and control, Fa/-, Zucker rats. The adipose tissue mass was greater with the LCT diet than with either the **MCT** or control diets, but there was no significant difference between the **MCT** and control diets. TG synthesis from labeled substrates was not modified by the **MCT** diet when compared with the control, but was decreased by the LCT diet. The results suggest that the use of **MCT** in treating human **obesity** would necessitate levels too high to be therapeutically practical.

L4 ANSWER 28 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

1983:70811 Document No. 98:70811 Overfeeding with **medium-chain triglyceride** diet results in diminished deposition of fat. Geliebter, Allan; Torbay, Naji; Bracco, E. Filippo; Hashim, Sami A.; Van Itallie, Theodore B. (Dep. Med., St. Luke's-Roosevelt Hosp. Cent., New York, NY, USA). American Journal of Clinical Nutrition, 37(1), 1-4 (English) 1983. CODEN: AJCNAC. ISSN: 0002-9165.

AB Rats were overfed with a diet containing **medium-chain triglyceride** (**MCT**) as the major fat source (45% of calories) or with isocaloric amts. of a diet containing long-chain triglyceride (LCT) for 6 wk twice daily via a gastrostomy tube.

MCT-fed rats gained 20% less weight and possessed fat depots weighing 23% less than LCT-fed rats. Mean adipocyte size was smaller in **MCT**- than in LCT-fed rats. Wts. of carcass protein and water were similar for both groups as were concns. of serum insulin and levels of phys. activity. The decreased deposition of fat in the **MCT**-fed rats may have resulted from obligatory oxidation of **MCT**-derived fatty acids in the liver after being transported there via the portal vein, leaving almost no **MCT** derivs. for incorporation into body fat. **MCT** may have potential for dietary prevention of human **obesity**.

L4 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

1982:614639 Document No. 97:214639 Medium-chain triglycerides: an update. Bach, Andre C.; Babayan, Vigen K. (Lab. Pathol. Gen., Hosp. Civ., Strasbourg, Fr.). American Journal of Clinical Nutrition, 36(5), 950-62 (English) 1982. CODEN: AJCNAC. ISSN: 0002-9165.

AB A review of the literature on the medical and nutritional use of medium-chain triglycerides (MCTs) since 1970 is presented with 128 refs. and addnl. discussions on the various modifications and applications of the MCTs in the synthesis of certain structured lipids. The metabolism of MCTs in the liver and extrahepatic tissues is discussed along with further documentation of the use of MCTs in malabsorption and hyperlipidemia cases. Recent applications of MCTs and modified MCTs in hyperalimentation, deficiency in the carnitine system, epilepsy, **obesity**, and other special areas of application are cited. The use of medium-chain monodiglycerides for dissolving cholesterol gallstones is presented. The contraindications for the use of MCTs in ketosis, acidosis, and cirrhosis are also discussed. Suggestions for use of MCTs in a variety of medical and nutritional applications are presented.

L4 ANSWER 30 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

1982:543544 Document No. 97:143544 Hyperproteinic or hyperlipidic diets (LCT or **MCT**) in the genetically-obese Zucker rat. Preliminary results. Bach, A.; Chanez, M.; Bois-Joyeux, B.; Delhomme, B.; Schirardin, H.; Peret, J. (Serv. Med. Interne A, Hop. Civil, Strasbourg, Fr.). Cahiers de Nutrition et de Dietetique, 17(2), 103-4 (French) 1982. CODEN: CNDQA8. ISSN: 0007-9960.

AB A hyperproteinic (63.9 and 88.8% of the diet, by weight) diet at a normal lipid level (3.5% sunflower oil) decreased the daily weight gains, energy ingested and retained (KJ/day), N retained (mg/day), and the lipid gain of Zucker rats as compared to a normal diet (16.3% casein protein). The decreases were higher with the highest starch-free proteinic diet than with the hyperproteinic diet. On this diet, part of the protein was converted into lipids after deamination. A hyperlipidic (22.9%)-hyperproteinic (69.4% casein) diet decreased all the above indexes as compared with a hyperlipidic-normal proteinic diet and substitution of medium-chain triglycerides (**MCT**; 49.4% of the diet) for an equivalent amount of long-chain triglycerides (LCT) in the hyperlipidic diet had the most neg. effect in both the hyperlipidic-normal and hyperlipidic-hyperproteinic diets. The indexes studied were least on the hyperproteinic-**MCT** diet. When the indexes of the hyperproteinic-normal lipid diet were compared with those of the hyperproteinic-hyperlipidic diet, it was evident that addition of the fats (either **MCT** or LCT) improved N retention.

L4 ANSWER 31 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

1982:526161 Document No. 97:126161 Effect of high fat weanling diets containing either medium-chain triglycerides or long-chain triglycerides on the development of **obesity** in the Zucker rat. Turkenkopf, Iris J.; Maggio, Carol A.; Greenwood, M. R. C. (Dep. Biol., Vassar Coll., Poughkeepsie, NY, 12601, USA). Journal of Nutrition, 112(7), 1254-63 (English) 1982. CODEN: JONUAI. ISSN: 0022-3166.

AB Zucker rats were early weaned onto either medium-chain (**MCT**) or long-chain triglycerides (LCT) to examine the effect on the development of

obesity. Preobese and lean pups were weaned at 16 days to isocaloric, isonitrogenous liquid diets containing either 65% **MCT** or LCT (by calories) or to a stocklike (5.5% fat, 72.6% carbohydrate) control diet or were pair-fed stocklike diet to **MCT**-fed rats until day 45. **MCT**-feeding lowered body weight gain and fat pad weight in obese and lean rats compared to stocklike-fed controls. Addnl., fat cell size and lipoprotein lipase (LPL) [9004-02-8] activity and hepatic acetyl CoA carboxylase [9023-93-2] activity were reduced in obese **MCT**-fed rats compared to obese controls fed stocklike diet. Except for altered LPL activity the effects produced by **MCT**-feeding were attributable to its anorectic effect. However, all obese rats, including the **MCT** group, developed an obese body composition and were hyperinsulinemic. The developmental sequence leading to **obesity** may be derived from a fundamental cellular defect that results in metabolic alterations in different tissues at critical periods of development. Thus, effective treatment of this genetic **obesity** requires a better understanding of fa gene action.

L4 ANSWER 32 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
1982:50044 Document No. 96:50044 **MCT** and genetic **obesity** in Zucker rats. Bach, A.; Schirardin, H. (Lab. Clin. Med. A, Hop. Civ., Strasbourg, F 67091, Fr.). Fett Parenter. Ernaehr., Symp., Meeting Date 1979, 12-18. Editor(s): Eckart, Joachim; Wolfram, G. W. Zuckschwerdt Verlag: Munich, Fed. Rep. Ger. (German) 1981. CODEN: 46VRAE.
AB In obese Zucker rats on a diet containing mainly **MCT** (triglycerides containing medium-chain fatty acids) for 10 wk, no substantial change was observed in serum and liver levels of fats and cholesterol and liver levels of water, protein, or glycogen as compared with those of the obese rats on a diet with triglycerides containing long-chain fatty acids (LCT). Ketogenesis in obese rats increased more than in normal rats on the **MCT**-containing diet. Serum and liver levels of cholesterol in normal rats on the **MCT**-containing diet decreased below the levels in normal rats on the LCT-containing diet. Thus, the diet with **MCT** does not correct metabolic disorders in **obesity** and is not suitable for dietary treatment of **obesity.**

L4 ANSWER 33 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
1981:101736 Document No. 94:101736 Medium chain length fatty acid esters and their medical and nutritional applications. Babayan, Vigen K. (Stokely-Van Camp, Inc., Indianapolis, IN, USA). Journal of the American Oil Chemists' Society, 58(1), 49A-51A (English) 1981. CODEN: JAOCA7. ISSN: 0003-021X.
AB A review with 30 refs. Caprylic and capric acid esters and their applications in medical, nutritional, and dietetic uses are described. Medium chain triglycerides (**MCT**) as a tool in the control of **obesity**, control in the cholesterol deposition in the tissues as well as a means of lowering serum cholesterol are cited as unique characteristics of such lipids. **MCT** as a source of quick energy and high energy is suggested as an alternative to the conventional fats and oils. The mono-diglycerides of caprylic and capric acid as cholesterol dissolving agents in treating of patients having cholesterol gallstones is described to illustrate the unique solvency properties of such mono esters in medical applications. The possibility of such mono esters of di- and polyhydric alcs. to act as co-solvents for oil and water systems is suggested which can be applied in medical, pharmaceutical, and allied fields. Structured lipids with a predominance of caprylic and capric acid to modify the properties of triglycerides is described for hyperalimentation uses as well as the special nutritional and dietetic needs.

L4 ANSWER 34 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN
1980:196843 Document No. 92:196843 Effects of medium- and long-chain triglyceride diets in the genetically obese Zucker rat. Bach, Andre; Schirardin, Henri; Chanussot, Francoise; Bauer, Marthe; Weryha, Andre (Lab. Clin. Med. A, Hop. Civ., Strasbourg, 67091, Fr.). Journal of

Nutrition, 110(4), 686-96 (English) 1980. CODEN: JONUAI. ISSN: 0022-3166.

AB To test whether the property of medium-chain fatty acids (which have 6-12 carbon atoms) being incorporated only in small amts. into the various tissues of a living organism could be exploited to treat **obesity**, genetically obese Zucker rats and their lean littermates were fed a diet containing 20%g medium-chain triacylglycerols (**MCT**) or long-chain triacylglycerols (LCT) for 10 wk. **MCT**, as compared with LCT, had the following effects: (1) **MCT** did not diminish weight gain in either the nonobese or the obese rats; (2) they increased ketogenesis more in the former than in the latter; (3) they increased the concentration of triacylglycerols in the liver of the obese rats but not of the lean ones; (4) they decreased the concentration of cholesterol in the liver of the lean but not of the obese rats, and (5) they did not particularly affect the concentration of proteins, glucose, and insulin in the blood. Thus, the influence of the genotype is much more important in the establishment of the biochem. characteristics of rats than is the nature of the fatty acids ingested. Replacing LCT in the diet with **MCT** did not correct any of the major metabolic disorders in obese rats and therefore cannot unaided constitute a solution to the problem of genetic **obesity.**

L4 ANSWER 35 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

1978:405059 Document No. 89:5059 Effect of **medium chain triglyceride** on lipogenesis and body fat in the rat. Lavau, Marcelle M.; Hashim, Sami A. (Dep. Med., St. Luke's Hosp. Cent., New York, NY, USA). Journal of Nutrition, 108(4), 613-20 (English) 1978. CODEN: JONUAI. ISSN: 0022-3166.

AB Body weight, epididymal and perirenal adipose tissue wts., plasma insulin [9004-10-8], 1-14C-labeled glucose [50-99-7] incorporation into CO2 and lipid in epididymal and perirenal, and activity of lipogenesis-related enzymes in epididymal, perirenal and liver were measured in rats fed a low-fat diet (LF), a 55% (by energy) **medium-chain triglyceride** diet (**MCT**), or a diet containing 60% corn oil, a long-chain triglyceride (LCT). In rats fed the **MCT** diet for 8 wks there was a 10% decrease in body weight associated with 40% decrease in the combined epididymal and perirenal wts. as compared to rats fed LF. After 4 wks, body weight and fat depots were reduced with **MCT** feeding and increased with LCT feeding, as compared to LF. In the 4-wk **MCT** fed rats, the capacity of the entire epididymal and perirenal adipose tissue to incorporate glucose into CO2 and lipids under both basal and insulin-stimulated conditions was .apprx.33% of that of LF fed rats. LCT was more effective than **MCT** in reducing glucose utilization in perirenal adipose tissue. The activities of acetyl-CoA carboxylase [9023-93-2], malic enzyme (ME) [9028-47-1], citrate cleavage enzyme (CCE) [9027-95-6], glucose-6-phosphate dehydrogenase (G6PDH) [9001-40-5], and 6-phosphogluconate dehydrogenase (6PGDH) [9001-82-5] in the 2 adipose tissue sites were strongly depressed by both LCT and **MCT** feeding, as compared to LF. In liver, **MCT** feeding decreased the activities of CCE, G6PDH and 6PGDH, by 50% but did not alter ME, as compared to LF. All these enzyme activities were reduced by >70% by LCT feeding. Insulin levels did not differ among the 3 groups of rats. Thus, unlike LCT, **MCT** has a reductive effect on fat stores, and like LCT, has a depressive effect on lipogenesis, suggesting possible application of **MCT** in **obesity** control.

L4 ANSWER 36 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

1977:583134 Document No. 87:183134 Ketogenic response to **medium-chain triglyceride** load in the rat. Bach, Andre; Schirardin, Henri; Weryha, Andre; Bauer, Marthe (Lab. Clin. Med. A, Hop. Civ., Strasbourg, Fr.). Journal of Nutrition, 107(10), 1863-70 (English) 1977. CODEN: JONUAI. ISSN: 0022-3166.

AB Ketonemia was induced in rats by a single oral load of medium-chain triglycerides (**MCT**) (C8:0 50.5%, C10:0 48.0%, C12:0 1.0%).

Medium-chain fatty acids, rather than being incorporated into the lipids synthesized by the liver, were oxidized there, with high production of ketone bodies. Severe and long-lasting hyperketonemia developed rapidly. With increased **MCT** loads, ketonemia also increased, although not linearly. The level of the hyperketonemia seemed equal in the 2 sexes. Ingestion of **MCT** by fasting rats caused an addnl. rise in ketonemia. Long-chain triglycerides were not ketogenic, since their constituent fatty acids were incorporated into lipids and are thus less subject to oxidation Lipids induced less severe ketonemia in genetically obese rats than in normal-weight rats.

L4 ANSWER 37 OF 37 CAPLUS COPYRIGHT 2005 ACS on STN

1974:69449 Document No. 80:69449 Dietary use of **MCT** [medium chain triglycerides]. Kaunitz, H. (Coll. Physicians Surg., Columbia Univ., New York, NY, USA). Balanced Nutr. Ther., Int. Symp., 25-30. Editor(s): Lang, Konrad. Thieme: Stuttgart, Ger. (English) 1971. CODEN: 27QNAU.

AB The metabolism of medium chain triglycerides and their influence on intestinal absorption disorders, lipid metabolism, and **obesity**, arteriosclerosis, and other pathol. states are reviewed. 31 refs.

```
=> s bmi and (mct or medium(w)chain(w)triglyceride)
          6873 BMI
          2667 MCT
        679944 MEDIUM
        613885 CHAIN
         35272 TRIGLYCERIDE
           701 MEDIUM(W)CHAIN(W)TRIGLYCERIDE
L5           7 BMI AND (MCT OR MEDIUM(W)CHAIN(W)TRIGLYCERIDE)

=> d l5 cbib,at 1-7
'AT' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, IPC, and NCL

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
```

```
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field
codes.  For a list of the display field codes, enter HELP DFIELDS at
an arrow prompt (=>).  Examples of formats include: TI; TI,AU; BIB,ST;
TI,IND; TI,SO.  You may specify the format fields in any order and the
information will be displayed in the same order as the format
specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR,
FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC
to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):d l5 cbib,ab 1-7
'D' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'
'L5' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'
'1-7' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, IPC, and NCL

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations
```

```
HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field
codes.  For a list of the display field codes, enter HELP DFIELDS at
an arrow prompt (=>).  Examples of formats include: TI; TI,AU; BIB,ST;
TI,IND; TI,SO.  You may specify the format fields in any order and the
information will be displayed in the same order as the format
specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR,
FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC
to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):bib

L5   ANSWER 1 OF 7  CAPLUS  COPYRIGHT 2005 ACS on STN
AN   2004:117751  CAPLUS
DN   140:162820
TI   Blood triglyceride level control agents containing medium-chain
     triglycerides, their use, and foods containing them
IN   Kozue, Hideaki; Kasai, Michio; Nosaka, Naohisa; Okazaki, Mitsuko;
     Igarashi, Osamu; Kondo, Kazuo
PA   Nisshin Oil Mills Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 16 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     --------------      ----   --------    --------------------    --------
PI   JP 2004043337        A2    20040212    JP 2002-200844          20020710
     US 2004071751        A1    20040415    US 2003-464865          20030619
PRAI JP 2002-200844       A     20020710

L5   ANSWER 2 OF 7  CAPLUS  COPYRIGHT 2005 ACS on STN
AN   2003:101950  CAPLUS
DN   138:303218
TI   Effect of medium-chain triglycerides on the postprandial triglyceride
     concentration in healthy men
AU   Kasai, Michio; Maki, Hideaki; Nosaka, Naohisa; Aoyama, Toshiaki; Ooyama,
     Katsuhiko; Uto, Harumi; Okazaki, Mitsuko; Igarashi, Osamu; Kondo, Kazuo
CS   Division of Healthcare Science Research Laboratory, Nisshin Oil Mills
     Ltd., Kanagawa, 239-0832, Japan
SO   Bioscience, Biotechnology, and Biochemistry (2003), 67(1), 46-53
     CODEN: BBBIEJ; ISSN: 0916-8451
PB   Japan Society for Bioscience, Biotechnology, and Agrochemistry
DT   Journal
LA   English
RE.CNT  40    THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5   ANSWER 3 OF 7  CAPLUS  COPYRIGHT 2005 ACS on STN
```

AN 2001:848736 CAPLUS
DN 136:134129
TI Dietary medium-chain triacylglycerols suppress accumulation of body fat in a double-blind, controlled trial in healthy men and women
AU Tsuji, Hiroaki; Kasai, Michio; Takeuchi, Hiroyuki; Nakamura, Masahiro; Okazaki, Mitsuko; Kondo, Kazuo
CS Division of Healthcare Science Research Laboratory, Nisshin Oil Mills, Ltd., Kanagawa, 239-0832, Japan
SO Journal of Nutrition (2001), 131(11), 2853-2859
CODEN: JONUAI; ISSN: 0022-3166
PB American Society for Nutritional Sciences
DT Journal
LA English
RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:720646 CAPLUS
DN 136:134120
TI Value of VLCD supplementation with medium chain triglycerides
AU Krotkiewski, M.
CS Department of Medical Rehabilitation, Sahlgrenska University Hospital, Goteborg, Swed.
SO International Journal of Obesity (2001), 25(9), 1393-1400
CODEN: IJOBDP; ISSN: 0307-0565
PB Nature Publishing Group
DT Journal
LA English
RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:691917 CAPLUS
DN 133:349542
TI Endogenous fat oxidation during medium chain versus long chain triglyceride feeding in healthy women
AU Papamandjaris, A. A.; White, M. D.; Raeini-Sarjaz, M.; Jones, P. J. H.
CS School of Dietetics and Human Nutrition, McGill University, Ste-Anne-de-Bellevue, QC, H9X 3V9, Can.
SO International Journal of Obesity (2000), 24(9), 1158-1166
CODEN: IJOBDP; ISSN: 0307-0565
PB Nature Publishing Group
DT Journal
LA English
RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:464772 CAPLUS
DN 131:284893
TI A novel frameshift mutation in exon 6 (the site of Asn 291) of the lipoprotein lipase gene in type I hyperlipidemia
AU Kobayashi, Junji; Nagashima, Izumi; Taira, Kouichi; Hikita, Minoru; Tamura, Ken; Bujo, Hideaki; Morisaki, Nobuhiro; Saito, Yasushi
CS The Second Department of Internal Medicine, Chiba University School of Medicine, Chiba City, Japan
SO Clinica Chimica Acta (1999), 285(1-2), 173-182
CODEN: CCATAR; ISSN: 0009-8981
PB Elsevier Science Ireland Ltd.
DT Journal
LA English
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:362392 CAPLUS
DN 131:144034
TI Components of total energy expenditure in healthy young women are not affected after 14 days of feeding with medium- versus long-chain triglycerides
AU Papamandjaris, Andrea A.; White, Matthew D.; Jones, Peter J. H.
CS School of Dietetics and Human Nutrition, Faculty of Agricultural and Environmental Sciences, McGill University, Bellevue, QC, Can.
SO Obesity Research (1999), 7(3), 273-280
CODEN: OBREFR; ISSN: 1071-7323
PB North American Association for the Study of Obe sity
DT Journal
LA English
RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l5 cbib,ab 1-7

L5 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
2004:117751 Document No. 140:162820 Blood triglyceride level control agents containing medium-chain triglycerides, their use, and foods containing them. Kozue, Hideaki; Kasai, Michio; Nosaka, Naohisa; Okazaki, Mitsuko; Igarashi, Osamu; Kondo, Kazuo (Nisshin Oil Mills Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2004043337 A2 20040212, 16 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2002-200844 20020710.
AB The agents contain medium-chain triglycerides, wherein ≥90% of the constituent fatty acids comprises C8 and C10 saturated fatty acids, weight ratio of C8 saturated fatty acids and C10 saturated fatty acids is 60:40-85:15, and rate of C8 saturated fatty acids to total fatty acids at the 2-position of triglycerides is 60-85%. The agents are used for controlling blood triglyceride concentration of persons with **BMI** ≥23. Also claimed are foods containing the agents. Mixing 999 g ODO (a com. medium-chain triglycerides) and 1 g tocopherol gave a blood triglyceride level control agent. A beverage containing the agent, dextrin, casein, and sucrose significantly suppressed postprandial increase in blood triglycerides in volunteers with MI ≥23. Blood triglyceride levels of volunteers with **BMI** <23 was not affected by the beverage.

L5 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
2003:101950 Document No. 138:303218 Effect of medium-chain triglycerides on the postprandial triglyceride concentration in healthy men. Kasai, Michio; Maki, Hideaki; Nosaka, Naohisa; Aoyama, Toshiaki; Ooyama, Katsuhiko; Uto, Harumi; Okazaki, Mitsuko; Igarashi, Osamu; Kondo, Kazuo (Division of Healthcare Science Research Laboratory, Nisshin Oil Mills Ltd., Kanagawa, 239-0832, Japan). Bioscience, Biotechnology, and Biochemistry, 67(1), 46-53 (English) 2003. CODEN: BBBIEJ. ISSN: 0916-8451. Publisher: Japan Society for Bioscience, Biotechnology, and Agrochemistry.
AB The blood serum lipid concns. after single doses of medium-chain triglycerides (**MCT**) or long-chain triglycerides (LCT) were studied in 25 men grouped by the body mass index (**BMI**). The test meals contained 10 g **MCT** or LCT. Blood samples were collected up to 6 h after the test meal intake. The LCT meal led to greater increases in areas under the curves (AUCs) for serum and chylomicron triglycerides in the **BMI** ≥23 vs. <23 kg/m2 **BMI** group. The magnitude of response after the intake of the **MCT** meal by the ≥23 kg/m2 **BMI** group was lower than after the LCT meal. Thus in subjects with **BMI** ≥23 kg/m2 the intake of **MCT** is preferable to LCT for maintaining low postprandial triglyceride concns.

L5 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

2001:848736 Document No. 136:134129 Dietary medium-chain triacylglycerols suppress accumulation of body fat in a double-blind, controlled trial in healthy men and women. Tsuji, Hiroaki; Kasai, Michio; Takeuchi, Hiroyuki; Nakamura, Masahiro; Okazaki, Mitsuko; Kondo, Kazuo (Division of Healthcare Science Research Laboratory, Nisshin Oil Mills, Ltd., Kanagawa, 239-0832, Japan). Journal of Nutrition, 131(11), 2853-2859 (English) 2001. CODEN: JONUAI. ISSN: 0022-3166. Publisher: American Society for Nutritional Sciences.

AB The authors investigated the effect of long-term ingestion of dietary medium-chain triacylglycerols (**MCT**) on body weight and fat in humans. Using a double-blind, controlled protocol, we assessed the potential health benefits of **MCT** compared with long-chain triacylglycerols (LCT) in 78 healthy men and women [body mass index (**BMI**) ≥ 23 kg/m2: n = 26 (**MCT**), n = 30 (LCT); **BMI** < 23 kg/m2: n = 15 (**MCT**), n = 7 (LCT)]. Changes in anthropometric variables, body weight and body fat during the 12-wk **MCT** treatment period were compared with those in subjects consuming the LCT diet. The subjects were asked to consume 9218 kJ/d and 60 g/d of total fat. The energy, fat, protein and carbohydrate intakes did not differ significantly between the groups. Body weight and body fat in both groups had decreased by wk 4, 8 and 12 of the study. However, in the subjects with **BMI** ≥ 23 kg/m2, the extent of the decrease in body weight was significantly greater in the **MCT** group than in the LCT group. In subjects with **BMI** ≥ 23 kg/m2, the loss of body fat in the **MCT** group (-3.86±0.3 kg) was significantly greater than that in the LCT group (-2.75±0.2 kg) at 8 wk. In addition, in subjects with **BMI** ≥ 23 kg/m2, the decrease in the area of s.c. fat in the **MCT** group was significantly greater than that in the LCT group at wk 4, 8 and 12. These results suggest that the **MCT** diet may reduce body weight and fat in individuals (**BMI** ≥ 23 kg/m2) more than the LCT diet.

L5 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

2001:720646 Document No. 136:134120 Value of VLCD supplementation with medium chain triglycerides. Krotkiewski, M. (Department of Medical Rehabilitation, Sahlgrenska University Hospital, Goteborg, Swed.). International Journal of Obesity, 25(9), 1393-1400 (English) 2001. CODEN: IJOBDP. ISSN: 0307-0565. Publisher: Nature Publishing Group.

AB BACKGROUND: Medium chain triglycerides (**MCT**) are energetically less dense, highly ketogenic, and more easily oxidized than long chain triglycerides (LCT). **MCT** also differ from LCT in their digestive and metabolic pathways. OBJECTIVE: To test the effects of **MCT** supplementation during a very low calorie diet (VLCD). SUBJECTS AND METHODS: Three groups of tightly matched obese women with body mass index (**BMI**) > 30 kg/m2 received an isoenergetic (578.5 kcal) VLCD (Adinax, Novo Vital, Sweden) enriched with **MCT** or LCT (8.0 and 9.9g/100g Adinax resp.) or a low-fat (3g/100g) and high-carbohydrate regimen. The diets were administered over 4 wk. Body composition was measured with DEXA and appetite/satiety-according to Blundell. Beta hydroxybutyric acid concentration in plasma and nitrogen excretion in urine was measured during consecutive days of VLCD. The study was performed in a randomized double-blind manner. RESULTS: The **MCT** group showed a significantly greater decrease in body weight during the first 2 wk. The contribution of body fat to the total weight loss was higher while the contribution of fat-free mass (FFM) was lower. The **MCT** group had a higher concentration of ketone bodies in plasma and a lower nitrogen excretion in urine. Hunger feelings were less intense while satiety was higher. These differences were observed during the first 2 wk of treatment and gradually declined during the third and fourth weeks. CONCLUSIONS: Replacement of LCT by **MCT** in the VLCD increased the rate of decrease of body fat and body weight and has a sparing effect on FFM. The intensity of hunger feelings was lower and paralleled the higher increase of ketone bodies. These effects gradually declined, indicating subsequent metabolic adaptation. Further studies are required to confirm the

proteinsparing and appetite-suppressing effects of **MCT** supplementation during the first 2 wk of VLCD treatment.

L5 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
2000:691917 Document No. 133:349542 Endogenous fat oxidation during medium chain versus long chain triglyceride feeding in healthy women. Papamandjaris, A. A.; White, M. D.; Raeini-Sarjaz, M.; Jones, P. J. H. (School of Dietetics and Human Nutrition, McGill University, Ste-Anne-de-Bellevue, QC, H9X 3V9, Can.). International Journal of Obesity, 24(9), 1158-1166 (English) 2000. CODEN: IJOBDP. ISSN: 0307-0565. Publisher: Nature Publishing Group.
AB OBJECTIVE: To compare the effect of medium chain triglycerides (**MCT**) vs long chain triglycerides (LCT) feeding on exogenous and endogenous oxidation of long chain saturated fatty acids (LCSFA) in women. SUBJECTS: Twelve healthy female subjects (age 19 - 26 yr, body mass index (**BMI**) 17.5 - 28.6 kg/m2) DESIGN AND MEASUREMENTS: In a randomized cross-over design, subjects were fed weight maintenance diets providing 15%, 45% and 40% of energy as protein, carbohydrate and fat, resp., with 80% of this fat comprising either a combination of butter and coconut oil (**MCT**) or beef tallow (LCT). Following 6 days of feeding, subjects were given daily oral doses of 1-13C labeled-myristic, -palmitic and -stearic acids for 8 days. Expired 13CO2 was used as an index of LCSFA oxidation with CO2 production assessed by respiratory gas exchange. RESULTS: No difference in exogenous LCSFA oxidation was observed as a function of diet on day 7. On day 14, greater combined cumulative fractional LCSFA oxidation (16.9 ± 2.5%/5.5 h vs 9.1 ± 1.2%/5.5 h, $P < 0.007$), net LCSFA oxidation (2956 ± 413 mg/5.5 h vs 1669 ± 224 mg/5.5 h, $P < 0.01$), and percentage dietary LCSFA contribution to total fat oxidation (16.3 ± 2.3%/5.5 h vs 9.5 ± 1.5%/5.5 h; $P < 0.01$) were observed in women fed the **MCT** vs LCT diet. With the **MCT** diet, but not the LCT diet, combined cumulative fractional LCSFA oxidation ($P < 0.03$), net LCSFA oxidation ($P < 0.03$), and percentage dietary LCSFA contribution to total fat oxidation ($P < 0.02$) were increased at day 14 as compared to day 7. Day 14 results indicated increased endogenous LCSFA oxidation during **MCT** feeding. CONCLUSION: The capacity of **MCT** to increase endogenous oxidation of LCSFA suggests a role for **MCT** in body weight control over the long term.

L5 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
1999:464772 Document No. 131:284893 A novel frameshift mutation in exon 6 (the site of Asn 291) of the lipoprotein lipase gene in type I hyperlipidemia. Kobayashi, Junji; Nagashima, Izumi; Taira, Kouichi; Hikita, Minoru; Tamura, Ken; Bujo, Hideaki; Morisaki, Nobuhiro; Saito, Yasushi (The Second Department of Internal Medicine, Chiba University School of Medicine, Chiba City, Japan). Clinica Chimica Acta, 285(1-2), 173-182 (English) 1999. CODEN: CCATAR. ISSN: 0009-8981. Publisher: Elsevier Science Ireland Ltd..
AB A new heterozygous lipoprotein lipase gene defect has been identified in a type I hyperlipidemic patient at the position of notable amino acid Asn 291. The patient is a 33-yr-old male. His body mass index (**BMI**) was 18.5 kg/m2. The total cholesterol (TC), triglycerides (TG) and high d. lipoprotein-cholesterol (HDL-C) concentration from his fasting plasma were 4.8, 11.9 and 0.4 mmol/l, resp. The lipoprotein lipase (LPL) activity and mass in the postheparin plasma (PHP) from the patient were 0.58 mmol/mL/h (normal range: 7.7) and 244 ng/mL (normal range: 192), resp. The hepatic lipase activity of the PHP from the patient was 10.6 mmol/mL/h (normal range: 9.9). DNA anal. of the LPL gene revealed that this patient had a heterozygous one nucleotide deletion of A coding Asn 291, resulting in a premature termination of the LPL protein at amino acid residue 303. The other abnormality in the LPL gene of the proband was an amino acid residue 194 defect (Ile194 Thr), which is known to cause a defective enzyme. A **medium-chain triglyceride** (**MCT**) loading test was conducted to find how this triglyceride affects plasma lipoprotein metabolism in this patient in a short term. The plasma total

cholesterol (TC) or high d. lipoprotein (HDL)-C levels did not change significantly after oral administration of a fatty meal containing long chain triglycerides (LCT) or **MCT**. The plasma TG level, increased from 11.9 to 19.2 mmol/l (+61%) at 6 h after loading a fatty meal containing LCT, whereas the plasma TG levels tended to even decrease at 6 h after oral administration of an **MCT**, tricaprin (from 11.6 to 10.5 mmol/l (-9.4%)). These results suggest that **MCT**, as opposed to LCT, is useful for treatment of type I hyperlipidemia with a novel mutation at the notable amino acid Asn 291 of the LPL gene.

L5 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
1999:362392 Document No. 131:144034 Components of total energy expenditure in healthy young women are not affected after 14 days of feeding with medium- versus long-chain triglycerides. Papamandjaris, Andrea A.; White, Matthew D.; Jones, Peter J. H. (School of Dietetics and Human Nutrition, Faculty of Agricultural and Environmental Sciences, McGill University, Bellevue, QC, Can.). Obesity Research, 7(3), 273-280 (English) 1999. CODEN: OBREFR. ISSN: 1071-7323. Publisher: North American Association for the Study of Obe sity.

AB To examine the effect of consumption of medium-chain triglycerides (**MCT**) vs. long-chain triglycerides (LCT) on total energy expenditure (TEE) and its components in young women during the second week of a 2-wk feeding period. Twelve healthy lean women (age: 22.7±0.7 yr, body mass index [**BMI**]: 21.5±0.8 kg/m2) were fed weight maintenance diets containing 15% of energy as protein, 45% as carbohydrate, and 40% as fat, 80% of which was treatment fat, for 2 wk in a randomized cross-over design separated by a 2-wk washout period. Dietary fat was composed of triglycerides containing either 26% medium-chain fatty acids (MCFA) and 74% long-chain fatty acids (LCFA), or 2% MCFA and 98% LCFA. Free-living TEE was measured from day 7 to 14 on each dietary treatment using doubly labeled water (DLW). Basal metabolic rate (BMR) and thermic effect of food (TEF) were measured on days 7 and 14 using respiratory gas exchange anal. (RGE) for 30 min and 330 min, resp. Activity-induced energy expenditure (AIEE) was derived as the difference between TEE and the sum of BMR and TEF. The average TEE while consuming the **MCT** diet (2246±98 kcal/day) did not differ from that of the LCT diet (2186±138 kcal/day.). BMR was significantly higher on the **MCT** diet on day 7 (1219±38 kcal/day vs. 1179±42 kcal/day), but not on day 14; there was no effect of diet on TEF. There were no differences in BMR, TEF, or AIEE between diets when expressed as percentages of TEE. On average, BMR, TEF, and AIEE represented 54.6%, 8.2%, and 37.2%, resp., of TEE. Results suggest that between day 7 and day 14 feeding of **MCT** vs. LCT at these levels, TEE is not affected and that increases seen in energy expenditure following **MCT** feeding may be of short duration. Thus, compensatory mechanisms may exist which blunt the effect of **MCT** on energy components over the longer term.

```
=> s weight(w)loss and (mct or medium(w)chain(w)triglyceride)
        106726 WEIGHT
        546349 LOSS
          2938 WEIGHT(W)LOSS
          2667 MCT
        679944 MEDIUM
        613885 CHAIN
         35272 TRIGLYCERIDE
           701 MEDIUM(W)CHAIN(W)TRIGLYCERIDE
L6           9 WEIGHT(W)LOSS AND (MCT OR MEDIUM(W)CHAIN(W)TRIGLYCERIDE)

=> d l6 cbib,ab 1-9
```

L6 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN
2004:64192 Document No. 140:320545 Effects of margarine containing medium-chain triacylglycerols on body fat reduction in humans. Nosaka, Naohisa; Maki, Hideaki; Suzuki, Yoshie; Haruna, Hirofumi; Ohara, Atsushi;

Kasai, Michio; Tsuji, Hiroaki; Aoyama, Toshiaki; Okazaki, Mitsuko; Igarashi, Osamu; Kondo, Kazuo (Division of Healthcare Science, Research Laboratory, The Nisshin Oillio, Ltd., Kanagawa, Japan). Journal of Atherosclerosis and Thrombosis, 10(5), 290-298 (English) 2003. CODEN: JATHEH. ISSN: 1340-3478. Publisher: Japan Atherosclerosis Society.

AB The authors found previously that the ingestion of margarine containing medium-chain triacylglycerols (**MCT**) resulted in a significant increase in postprandial thermogenesis when compared with long-chain triacylglycerols (LCT). Diets that included margarine containing **MCT** and LCT were compared for 12 wk in 73 subjects to investigate the effects on body weight, body fat, areas of s.c. and visceral fat, serum total cholesterols, triglycerides, lipoproteins, plasma glucose, serum insulin, total ketone bodies, and the activities of aspartate aminotransferase, alanine aminotransferase, and γ-glutamyltranspeptidase. The authors conducted a double-blind, controlled study and used blended rapeseed oil and soybean oil (LCT) as a comparison. Two groups ingested 2,100-2,400 kcal/day of energy, 65-73 g/day of total fat, and 14 g/day of test margarine (5 g/day of **MCT** or LCT). The subjects on the **MCT** diet demonstrated significant decreases in body fat weight (- 3.8 ± 2.4 kg vs - 2.4 ± 1.7 kg; **MCT** vs LCT, mean ± SD), s.c. fat (- 38.2 ± 29.9 cm2 vs - 22.6 ± 19.3 cm2), and visceral fat (- 12.2 ± 11.2 cm2 VS - 1.6 ± 12.8 cm2) after 12 wk. There were no clin. differences in measured blood parameters. The authors suggest that the postprandial increase in thermogenesis and control of postprandial triglyceride levels may explain these results.

L6 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

2004:18741 Document No. 140:82253 Novel approach to **weight loss** comprising a modified protein composition that regulates blood sugar in conjunction with compositions that increase oxygen uptake and suppress appetite. Mann, Morris; Mann, Maria A. (USA). U.S. Pat. Appl. Publ. US 2004005368 A1 20040108, 22 pp. (English). CODEN: USXXCO. APPLICATION: US 2002-187668 20020701.

AB Formulations and methods for enhancing lipolysis and the suppression of appetite are presented. Currently the preferred embodiment has these formulations as two sep. compns. because of taste considerations (the combined taste, currently, is disagreeable). However, it is known that the two sep. compns. can be combined into a single delivery systems, such as a drink, bar, gel or other nutritional delivery system known in the arts. The two sep. compns. are: (1) compns. comprising substances that enhance oxygen uptake, and (2) a protein supplement composition comprising substances that regulate blood sugar. The overall purpose of this invention is to induce weight loss in as short of time as possible with the least amount of discomfort. A claimed composition for weight loss comprises: (1) a first composition containing at least one substance that enhance oxygen uptake comprising caffeine, theophylline, Gingko-A, L-pyroglutamate, xanthinol nicotinate, N-acetyl-L-carnitine, choline bitartrate, DMAE, Mg glycinate, K aspartate, Cr arginate, L-phenylalanine, and (2) a second composition containing a protein supplement comprising at least one protein source and at least one substance that regulates blood sugar comprising: soy protein, inulin, L-methionine, **MCT** oil, vanilla flavoring, sucralose, CM-cellulose, carrageenan, Mg phosphate, Cr arginate, Cr chelidamate, glycine, vanadyl sulfate, and Mn gluconate.

L6 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

2003:917569 Document No. 140:302808 Greater rise in fat oxidation with **medium-chain triglyceride** consumption relative to long-chain triglyceride is associated with lower initial body weight and greater loss of subcutaneous adipose tissue. St-Onge, M-P.; Jones, P. J. H. (School of Dietetics and Human Nutrition, McGill University, Montreal, QC, Can.). International Journal of Obesity, 27(12), 1565-1571 (English) 2003. CODEN: IJOBDP. ISSN: 0307-0565. Publisher: Nature Publishing Group.

AB **Medium-chain triglyceride (MCT)** consumption has been shown to increase energy expenditure (EE) and lead to greater losses of the adipose tissue in animals and humans. The objective of this research was to examine the relationship between body composition and thermogenic responsiveness to **MCT** treatment. Randomized, crossover, controlled feeding trial, with diets rich in either **MCT** or long-chain triglyceride (LCT) (as olive oil) for periods of 4 wk each. A loyal of 19 healthy overweight men aged (x±s.e.m.) 44.5 ± 2.5 y with a body mass index of 27.8 ± 0.5 kg/m2. EE and body composition were measured using indirect calorimetry and magnetic resonance imaging, resp., at the baseline and end point of each feeding period. EE was measured for 30 min before consumption of a standard meal and for 5.5 h following the meal. Body weight (BW) decreased ($P<0.05$) by 1.03 ± 0.25 kg with **MCT** consumption compared to 0.62 ± 0.29 kg with LCT consumption. The difference in average EE between **MCT** and LCT consumptions was related to initial BW, such that men with lower initial BW had a greater rise in EE with **MCT** consumption relative to LCT on day 28 ($r=-0.472$, $P=0.04$) but not day 2 ($r=-0.368$, $P=0.12$). Similar results were obtained with fat oxidation on day 28 ($r=-0.553$, $P=0.01$). The greater rise in fat oxidation with **MCT** compared to LCT consumption on day 2 tended to be related to greater loss of BW after **MCT** vs LCT consumption ($r=-0.4075$, $P=0.08$). These data suggest that shunting of dietary fat towards oxidation results in diminished fat storage, as reflected by the loss of BW and s.c. adipose tissue. Furthermore, **MCT** consumption may stimulate EE and fat oxidation to a lower extent in men of greater BW compared to men of lower BW, indicative of the lower responsiveness to a rapidly oxidized fat by overweight men.

L6 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

2002:808428 Document No. 137:299965 Oral compositions that regulate and diminishes appetite. Mann, Morris A. (USA). U.S. US 6468988 B1 20021022, 4 pp. (English). CODEN: USXXAM. APPLICATION: US 2000-515586 20000229. PRIORITY: US 1999-PV122308 19990301.

AB A balanced composition of complex carbohydrate, protein, simple sugars, and lipids in a weight proportion of 3:2:1:1 substantially reduces appetite, even though the caloric composition is very low (about 240 cal/serving). This composition substantially facilitates weight loss, and increases exercise tolerance. It is designed for oral administration. Maltodextrin M180 46.857 Supro-675 22.0086, Supro-670 12.7792, fructose 10.9333, **MCT** oil 1.41991, Bromelain-80 1.41991, PSND precore 1.32336 inulin 0.85195, guar gum 0.70995, soybean oil 0.70995, sodium CM-cellulose 0.42597, Gum Carrageenan-601 0.21299 Aspartame (Nutrasweet) 0.1495, Vanilla-CE25096 0.1495, L-methionine 0.14199, and Anasthetic CE-26779 (vanilla) 0.1361% by weight

L6 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

2002:41479 Document No. 136:288861 Effects of 2-week ingestion of (-)-hydroxycitrate and (-)-hydroxycitrate combined with medium-chain triglycerides on satiety and food intake. Kovacs, E. M. R.; Westerterp-Plantenga, M. S.; de Vries, M.; Brouns, F.; Saris, W. H. M. (Department of Human Biology, Maastricht University, Maastricht, 6200 MD, Neth.). Physiology & Behavior, 74(4-5), 543-549 (English) 2001. CODEN: PHBHA4. ISSN: 0031-9384. Publisher: Elsevier Science Inc..

AB The aim of this study was to assess the effects of 2 wk of supplementation with (-)-hydroxycitrate (HCA) and HCA combined with medium-chain triglycerides (**MCT**) on satiety and energy intake. The exptl. design consisted of three intervention periods of 2 wk separated by washout periods of 2 or 6 wk in a double-blind, placebo-controlled, randomized, and crossover design. Seven male and 14 female normal to moderately obese subjects (mean±S.D.; age, 43±10 yr; body mass index, 27.6±2.0 kg/m2) participated in this study. Subjects consumed three self-selected meals and four isoenergetic snacks daily with either no supplementation (PLA), with 500 mg HCA, or 500 mg HCA and 3 g **MCT** (HCA+ **MCT**). Each intervention period ended with a test day, consisting of a standardized breakfast and ad libitum a lunch and a dinner. There

was a significant body weight (BW) loss during the 2 wk of intervention (PLA, -0.5±0.3 kg, P<.05; HCA, -0.4±0.2 kg, P<.05; HCA+**MCT**, -0.7±0.2 kg, P<.01), but this reduction was not different between treatments. Twenty-four-hour energy intake (PLA, 8.1±0.3 MJ; HCA, 8.3±0.3 MJ; HCA+**MCT**, 8.4±0.3 MJ) and the area under the curve of the appetite-related parameters during the test day were similar for all treatments. Two weeks of supplementation with HCA and HCA combined with **MCT** did not result in increased satiety or decreased energy intake compared to placebo in subjects losing BW.

L6 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN
1989:476211 Document No. 111:76211 Reversal of **weight loss** induced by tumor necrosis factor-alpha. Mahony, S. M.; Tisdale, M. J. (Pharm. Sci. Inst., Aston Univ., Birmingham, B4 7ET, UK). Cancer Letters (Shannon, Ireland), 45(3), 167-72 (English) 1989. CODEN: CALEDQ. ISSN: 0304-3835.

AB When injected into female NMRI mice tumor necrosis factor-α (TNF) produced a dose-related weight loss over the first 24 h, which was accompanied by and directly proportional to a decrease in both food and water intake. Body composition anal. after the first 8 h revealed that the weight loss was associated with a decrease in body compartments. Since the TNF-induced weight loss was accompanied by hypophagia and a concomitant hypoglycemia the authors attempted to reverse the weight loss by force-feeding either glucose or medium chain-triglycerides (**MCT**). Weight loss induced by TNF was reversed by both glucose and **MCT** and by administration of the equivalent vols. of water alone. The weight reversal was accompanied by an increased body water content. This suggests that the weight loss in mice induced by TNF is, at least in part, due to dehydration.

L6 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN
1989:433975 Document No. 111:33975 Effect of insulin on **weight loss** and tumor growth in a cachexia model. Beck, S. A.; Tisdale, M. J. (Pharm. Sci. Inst., Aston Univ., Birmingham, B4 7ET, UK). British Journal of Cancer, 59(5), 677-81 (English) 1989. CODEN: BJCAAI. ISSN: 0007-0920.

AB A comparison was made between the effects of daily insulin injection and a ketogenic diet on weight loss and tumor weight in a mouse exptl. model of cancer cachexia (MAC16). Weight loss associated with implantation of a transplantable mouse colon adenocarcinoma (MAC16) was reduced both by a ketogenic diet (80% of calor5es as **medium chain triglyceride** (80% **MCT**)) and by daily insulin injections without an increase in either food or water consumption. Animals fed the 80% **MCT** diet had a reduced tumor weight compared with controls fed a normal laboratory diet; in animals administered 20 U insulin kg/day, the tumor weight was 50% greater than in saline-infused controls. The stimulation of tumor growth by insulin was counteracted by the inclusion of 3-hydroxybutyrate in the drinking water without any alteration in the extent of weight loss. Depletion of both carcass fat and muscle dry weight in animals bearing the MAC16 tumor was reversed in animals administered either insulin or an 80% **MCT** diet. Animals bearing the MAC16 tumor had a reduced N balance compared with nontumor-bearing controls, mainly due to excess urea excretion. This was reversed toward control values in animals fed an 80% **MCT** diet, but not in animals administered insulin. Thus, a ketogenic diet is more effective than insulin administration in reversing the cachectic process, and it has the advantage of a concomitant reduction in tumor weight

L6 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN
1989:50892 Document No. 110:50892 A comparison of long-chain triglycerides and medium-chain triglycerides on **weight loss** and tumor size in a cachexia model. Tisdale, M. J.; Brennan, R. A. (Pharm. Sci. Inst., Aston Univ., Birmingham, B4 7ET, UK). British Journal of

Cancer, 58(5), 580-3 (English) 1988. CODEN: BJCAAI. ISSN: 0007-0920.

AB A comparison was made between the ability of long-chain (LCT) and medium-chain triglycerides (**MCT**) to prevent weight loss induced by the cachexia-inducing colon adenocarcinoma (MAC16) and to reduce tumor size in mice. There was no difference in calorie consumption or N intake between the various groups. When compared with a normal control high-carbohydrate, low-fat diet, animals fed **MCT** showed a reduced weight loss and a marked reduction in tumor size. In contrast, neither weight loss nor tumor size differed from the controls in animals fed the LCT diet. An elevated plasma level of 3-hydroxybuturate was found only in the animals fed the **MCT** diets. Administration of LCT caused an increase in the plasma level of FFA, which was not observed in the **MCT** group. Thus, diets containing **MCT** would provide the best ketogenic regime to reverse the weight loss in cancer cachexia with a concomitant reduction in tumor size.

L6 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

1988:220757 Document No. 108:220757 Studies on **medium-chain triglyceride** emulsion (II). Nitrogen metabolism in enteral administration of **MCT** [**medium chain triglyceride**] as compared with LCT [long chain triglyceride]. Iwasa, Yoshie; Ogoshi, Shohei; Iwasa, Masato; Kitagawa, Shiroshi; Ohmori, Yoshinobu; Mizobuchi, Shunji; Tamiya, Tatsuo (2nd Dep. Surgery, Kochi Med. Sch., Kochi, 781-51, Japan). Geka to Taisha, Eiyo, 21(4), 282-3 (Japanese) 1987. CODEN: GTEIDA. ISSN: 0389-5564.

AB Nutritional supplements for rats suffering from skin burns were examined Rats were subjected to 3rd degree burns on 25% of their skin. LCT or **MCT** was supplemented in the nutrient solution for enteral administration to the rats. Rats supplied with LCT or **MCT** showed less weight loss, improved N balance, and higher protein biosynthesis rates in liver and muscle.

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	180.64	380.92

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-38.69	-38.69

STN INTERNATIONAL LOGOFF AT 12:47:08 ON 08 FEB 2005